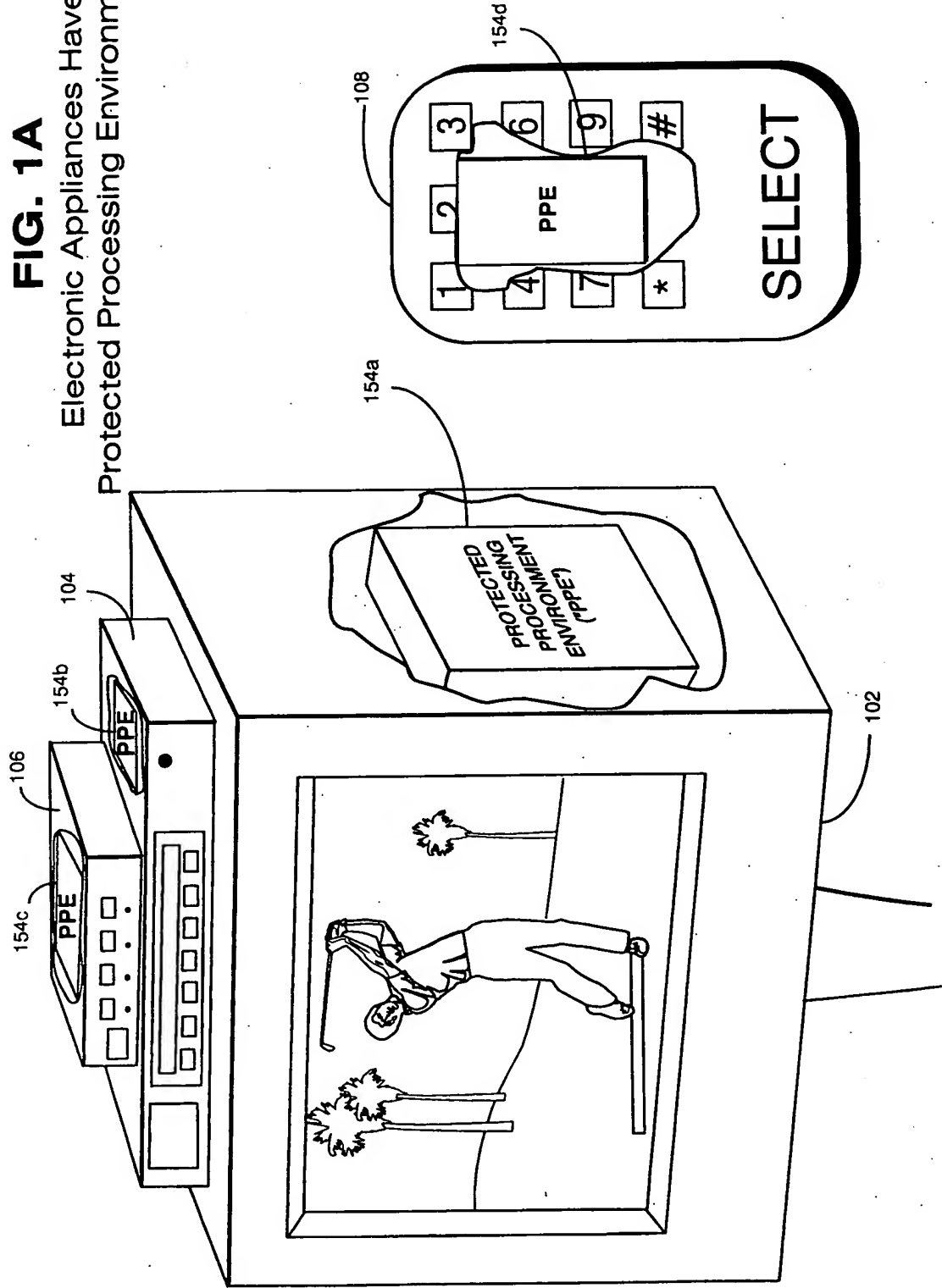
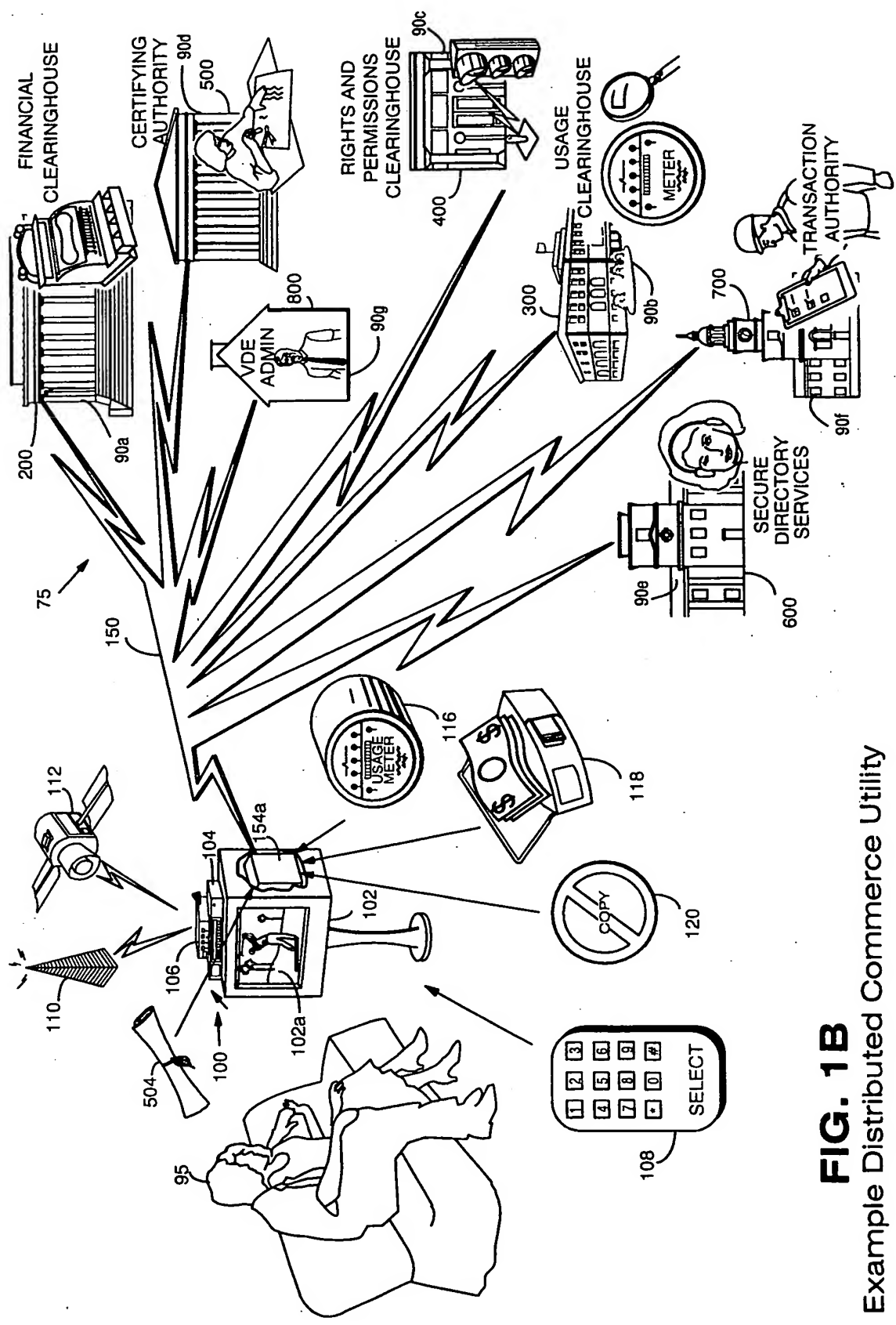
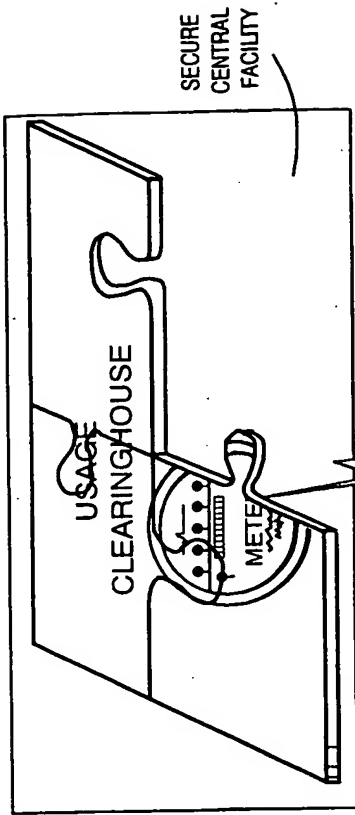


**FIG. 1**

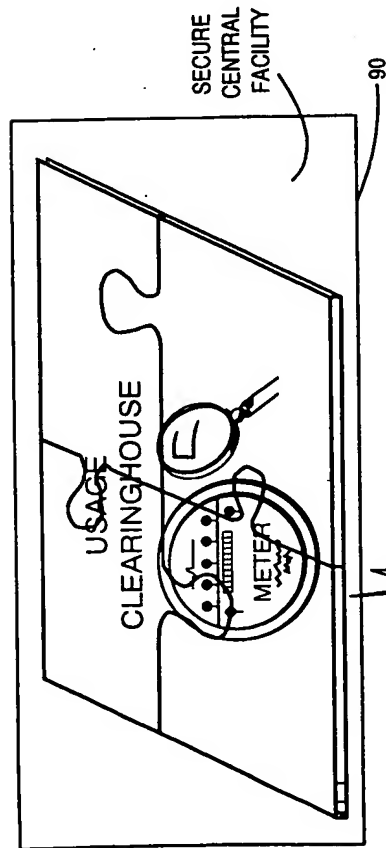
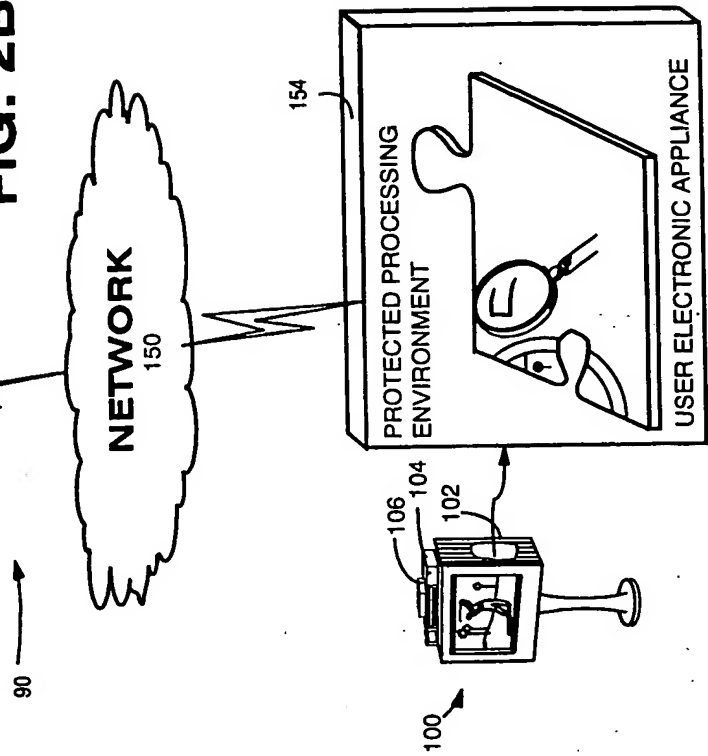
**FIG. 1A**  
Electronic Appliances Have  
Protected Processing Environments



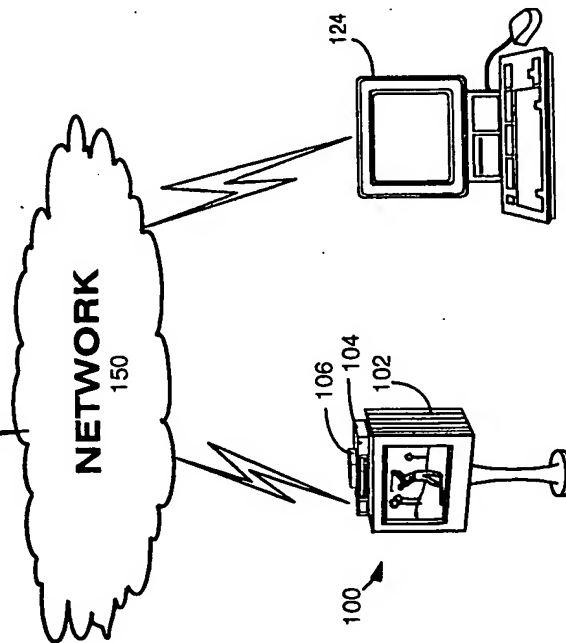


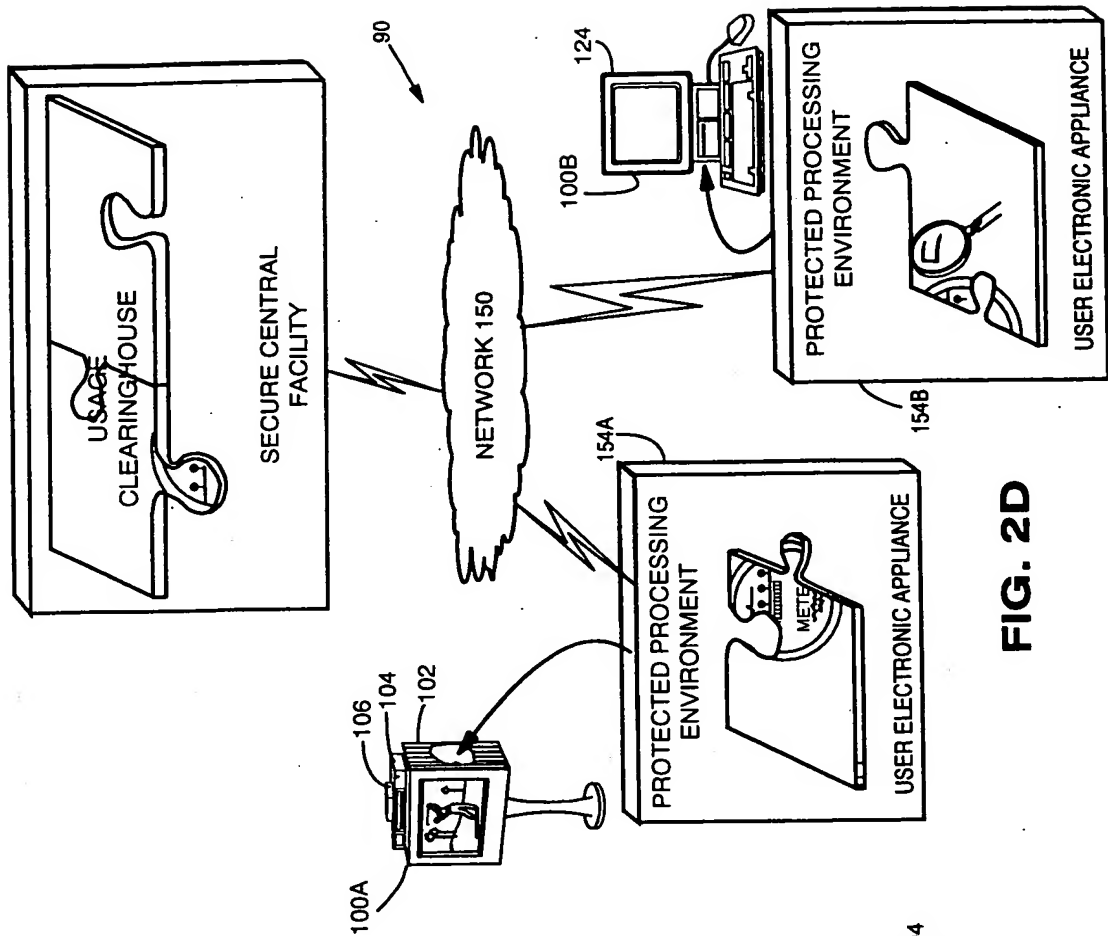


**FIG. 2B**

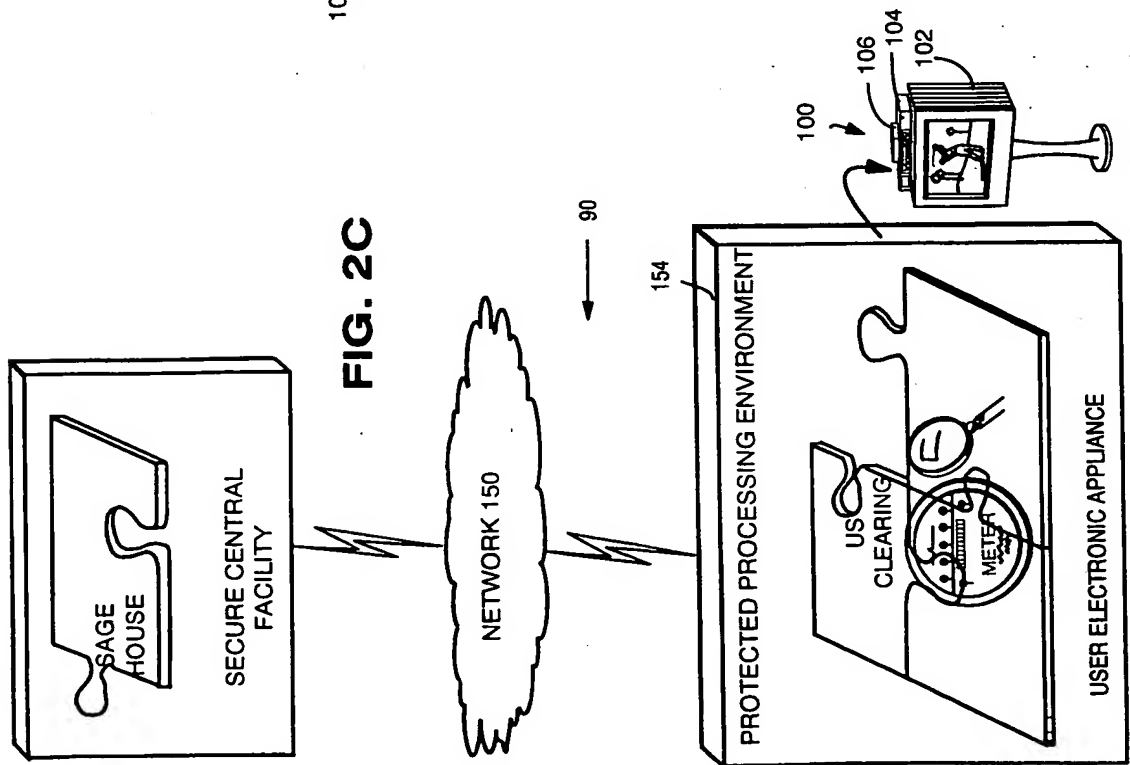


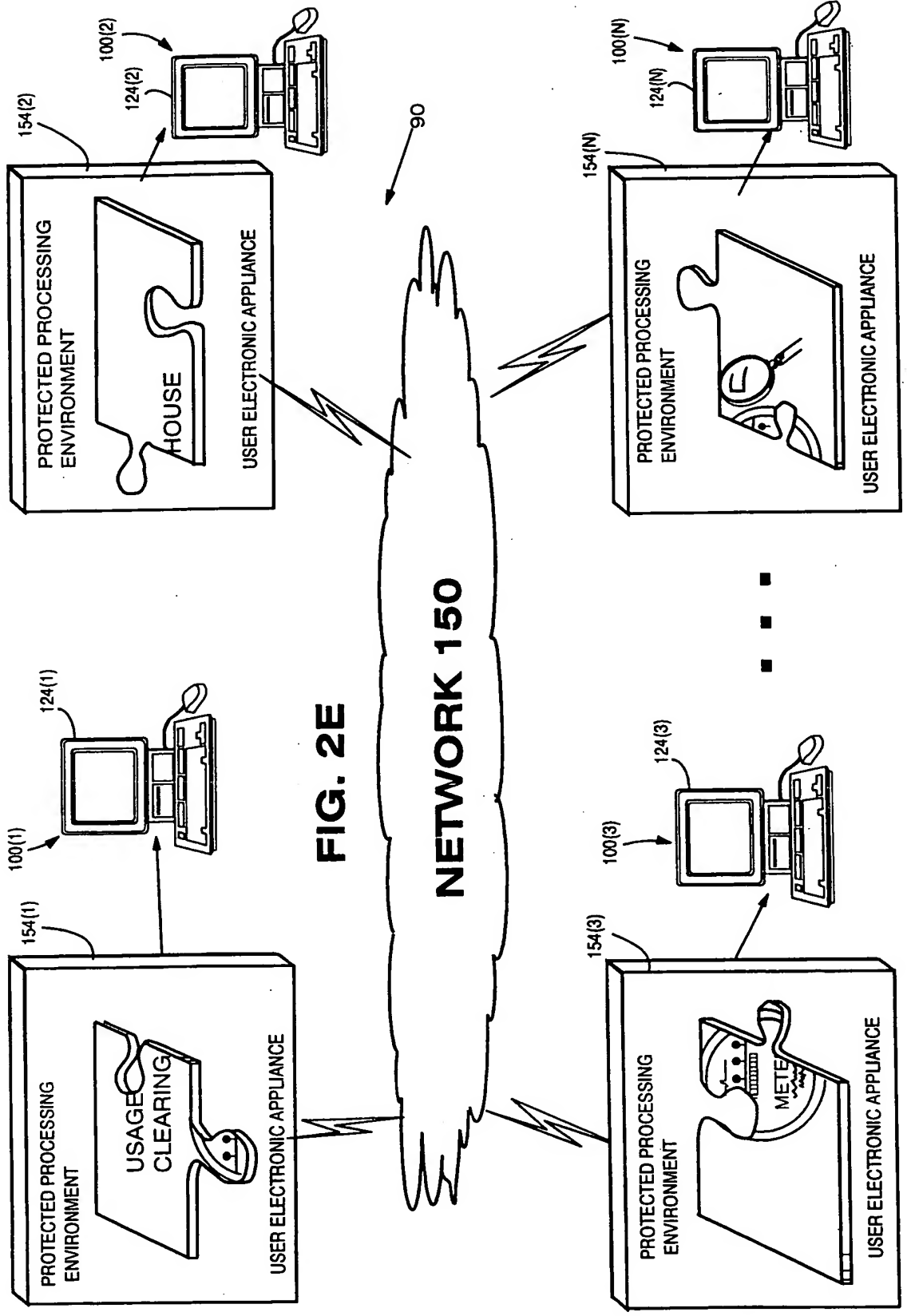
**FIG. 2A**



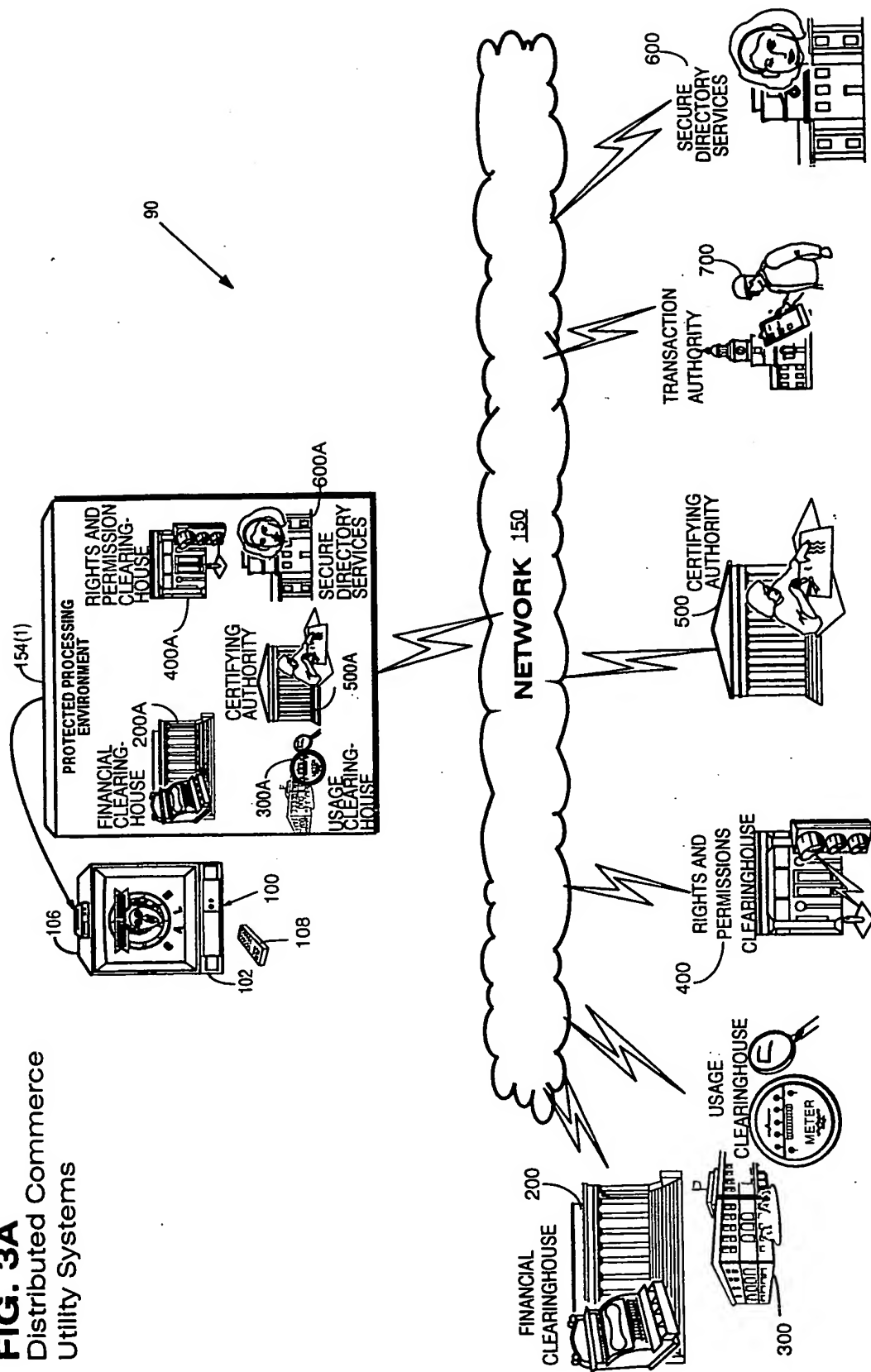


**FIG. 2D**

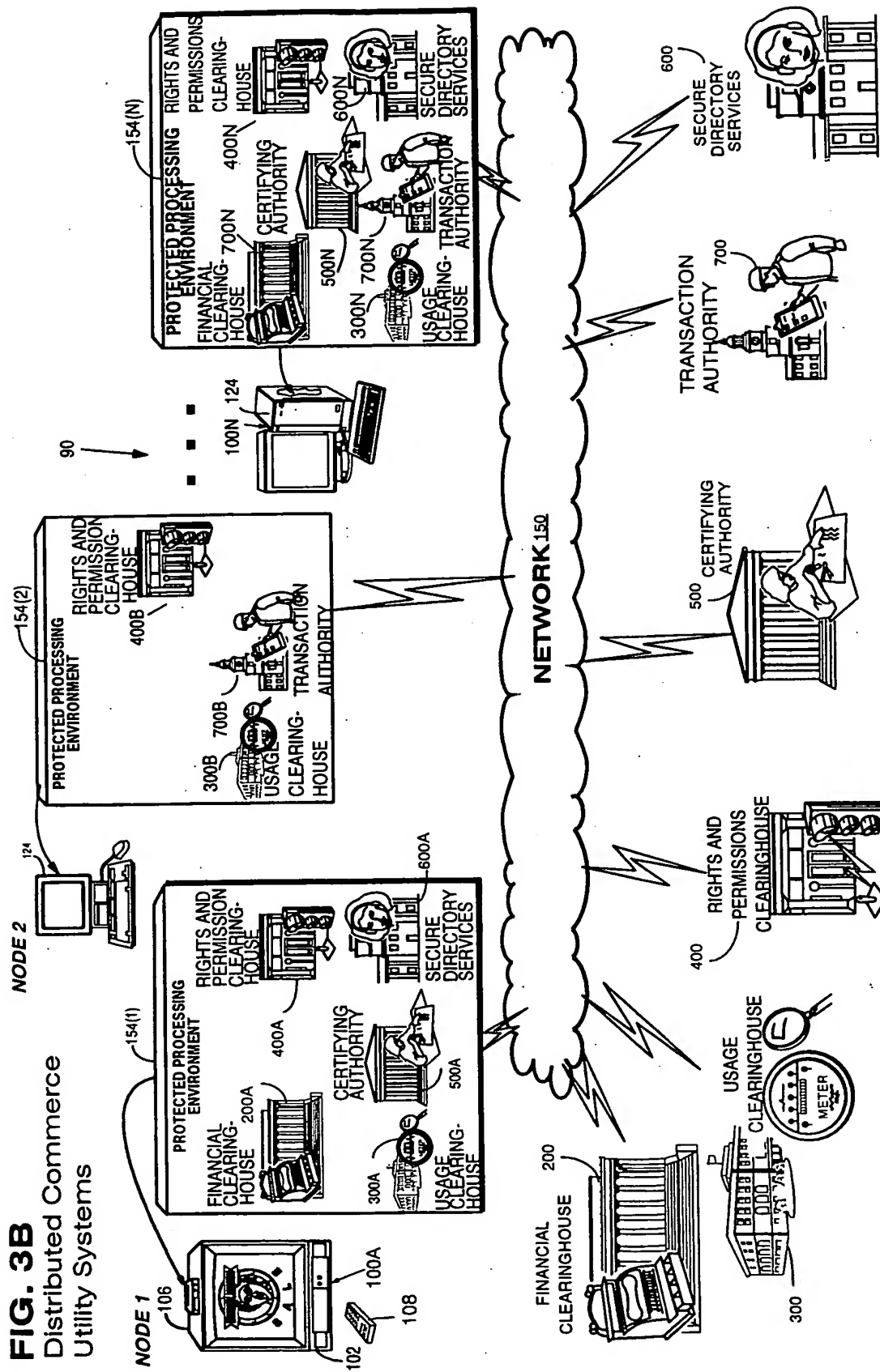




**FIG. 3A**  
Distributed Commerce  
Utility Systems



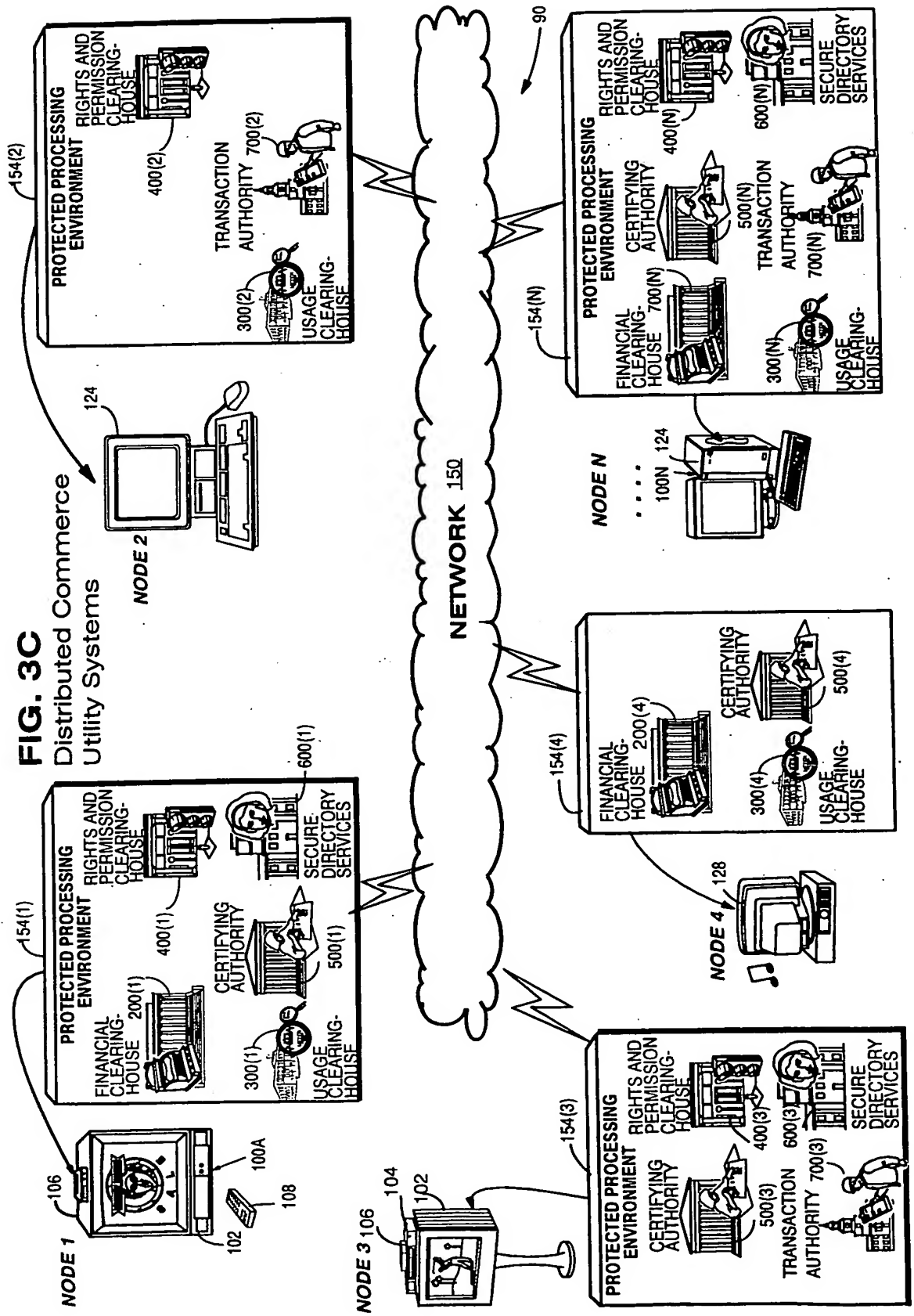
**FIG. 3B**  
Distributed Commerce  
Utility Systems

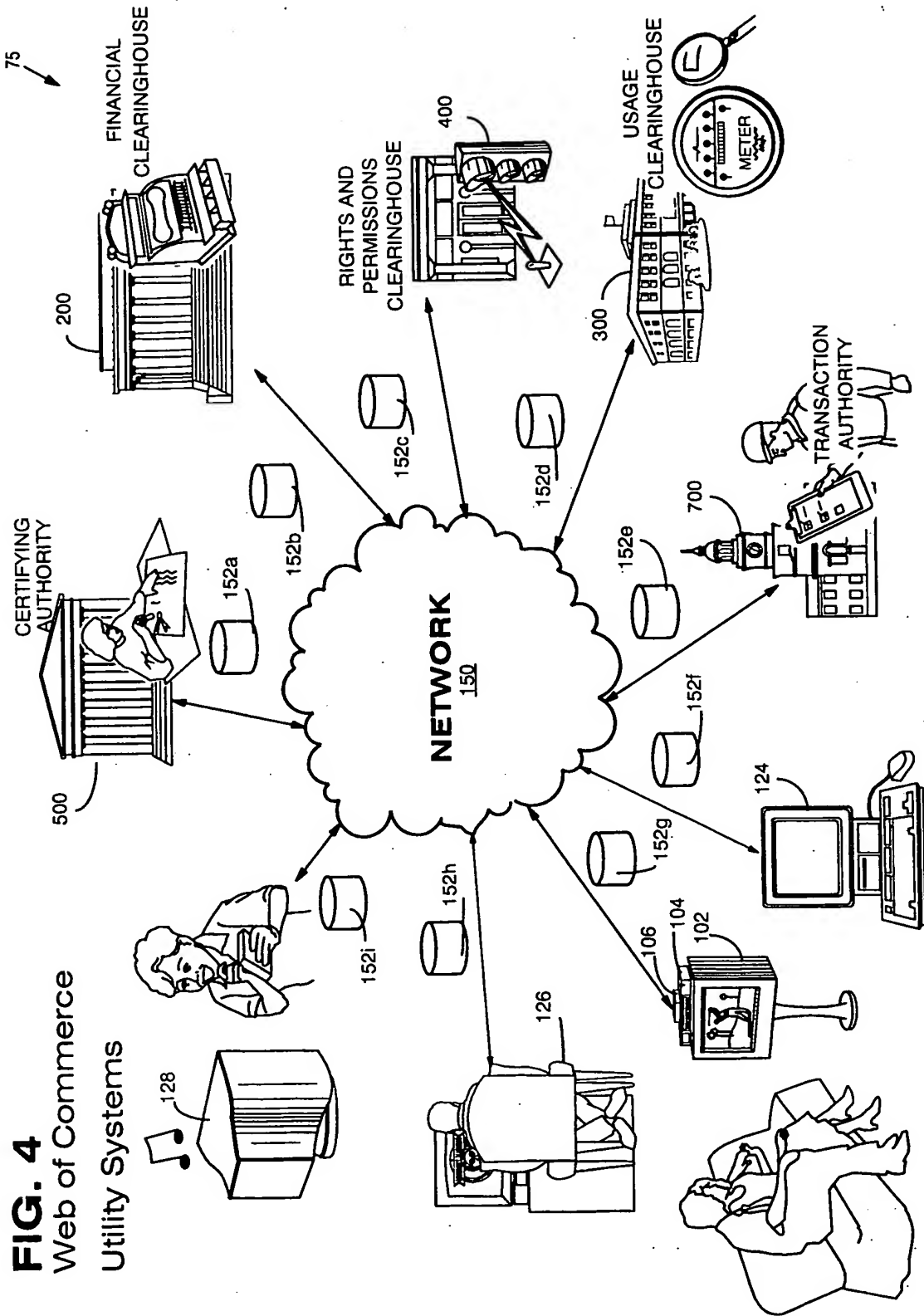


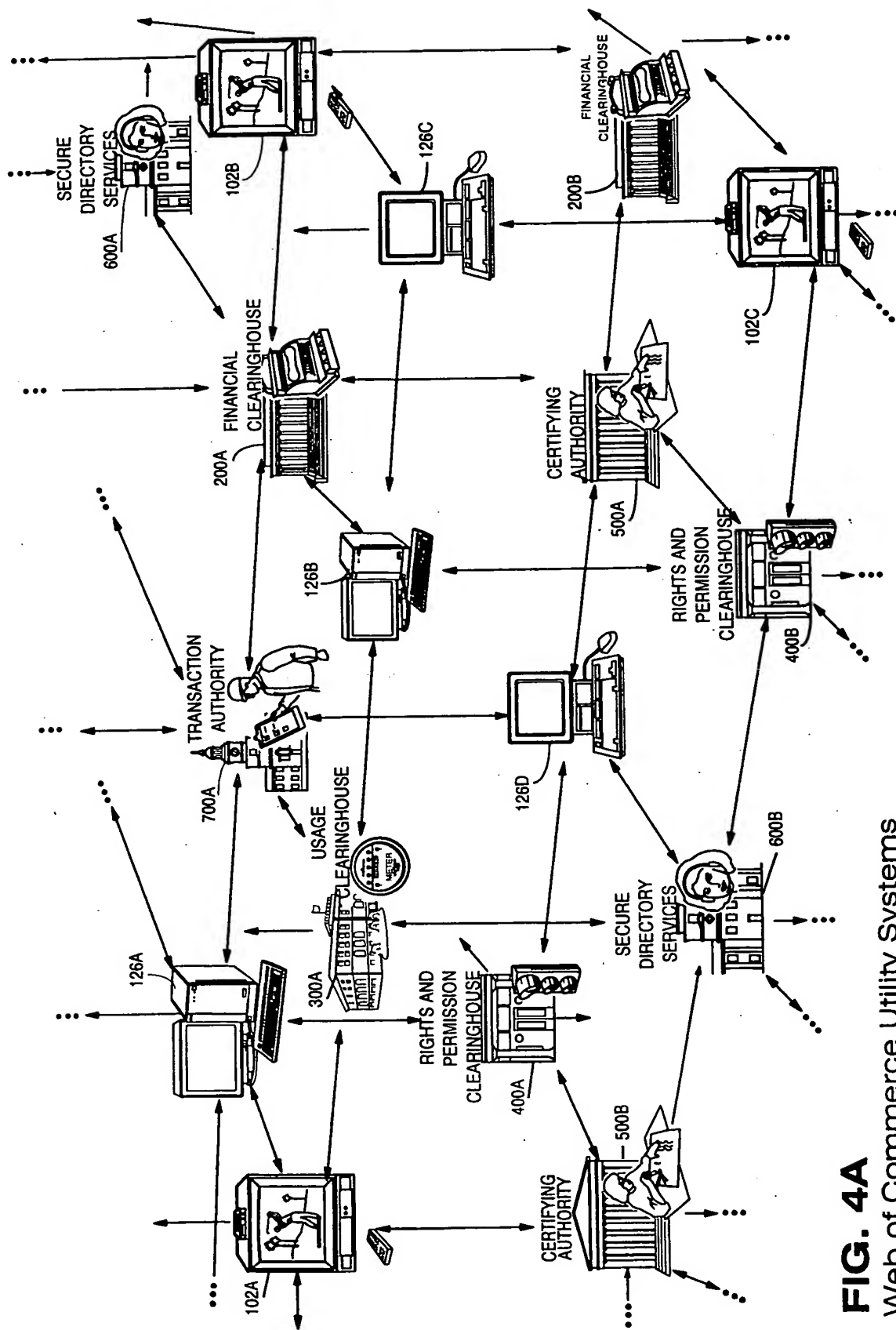


**FIG. 3C**

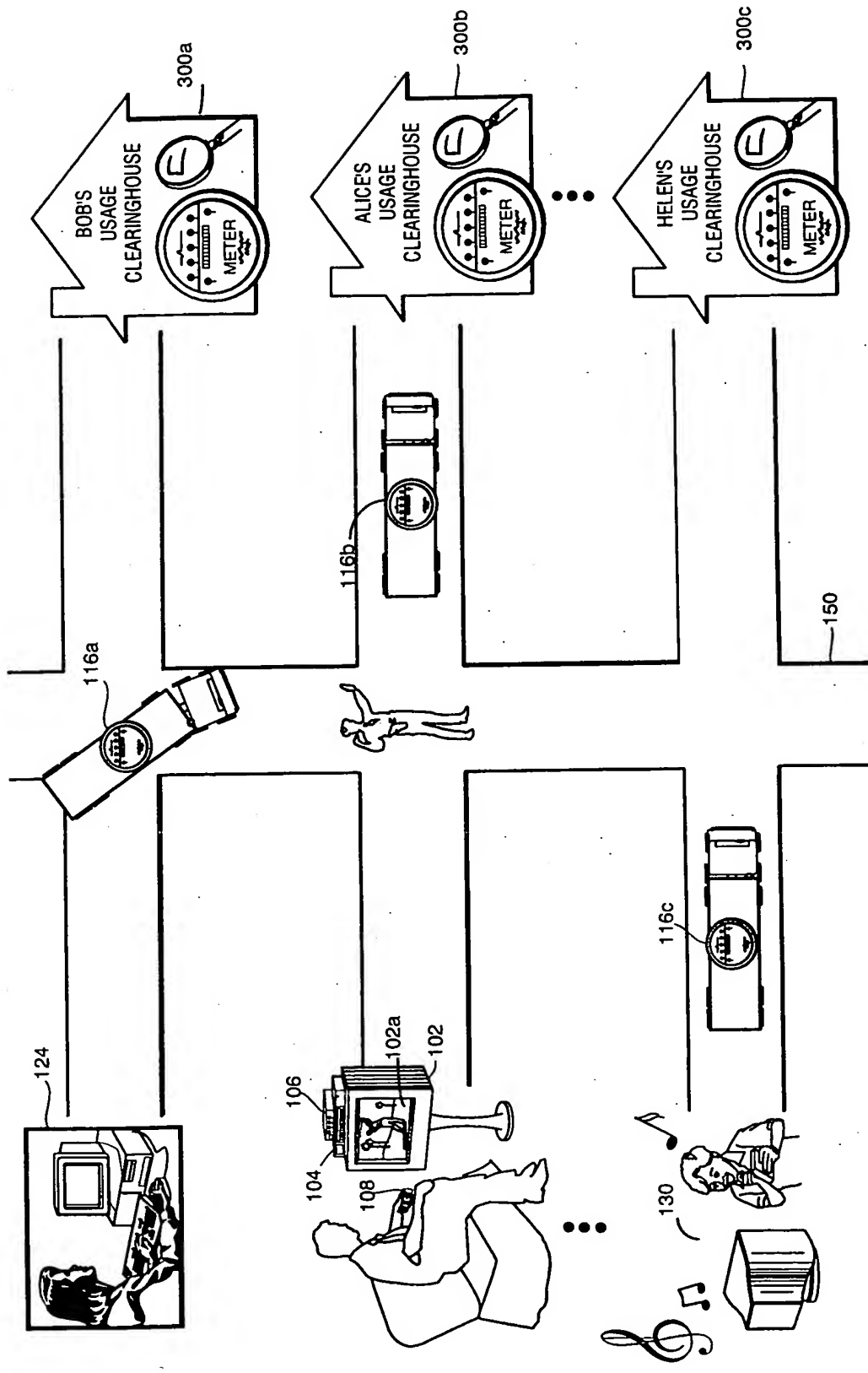
**Distributed Commerce  
Utility Systems**







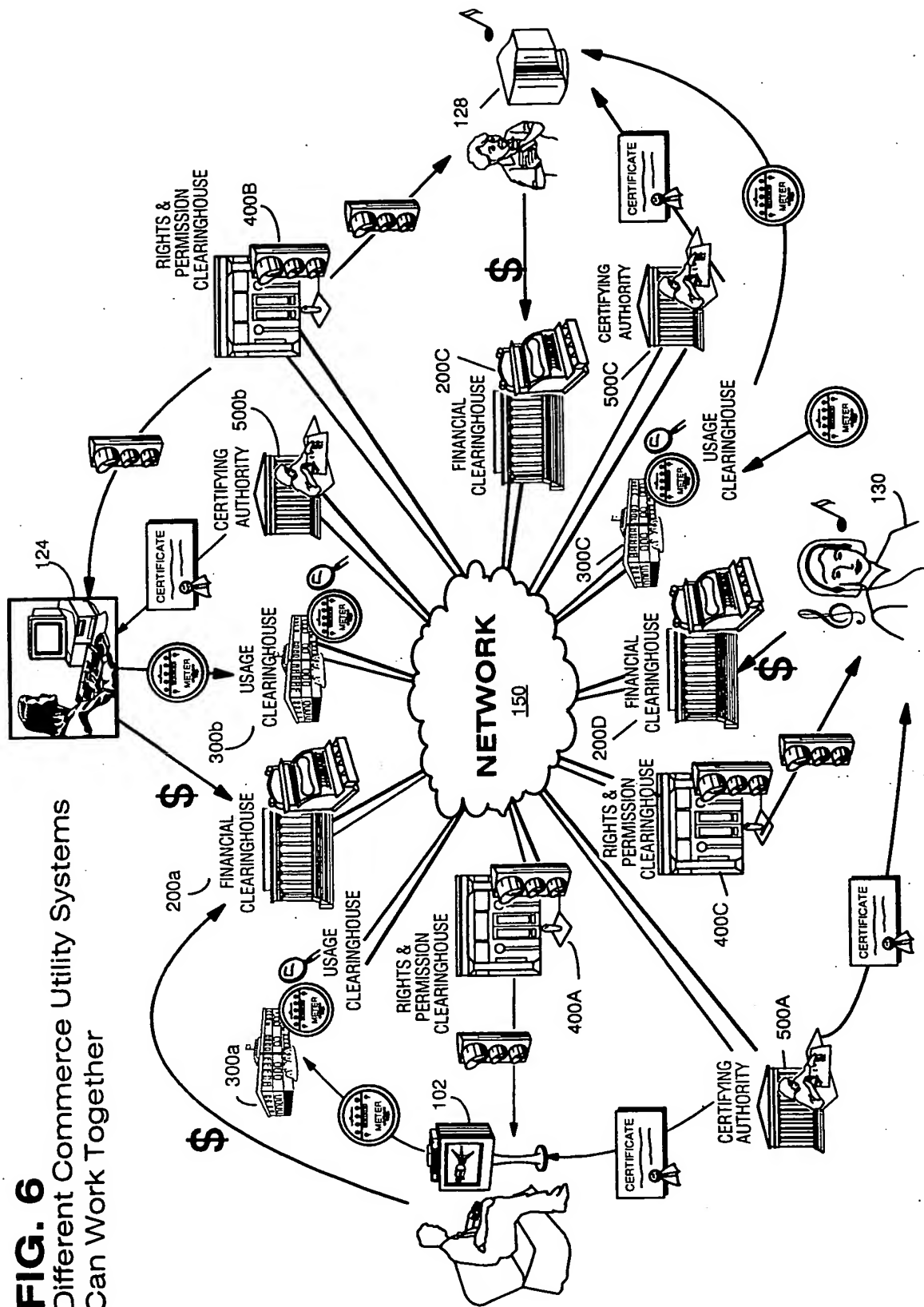
**FIG. 4A**  
Web of Commerce Utility Systems

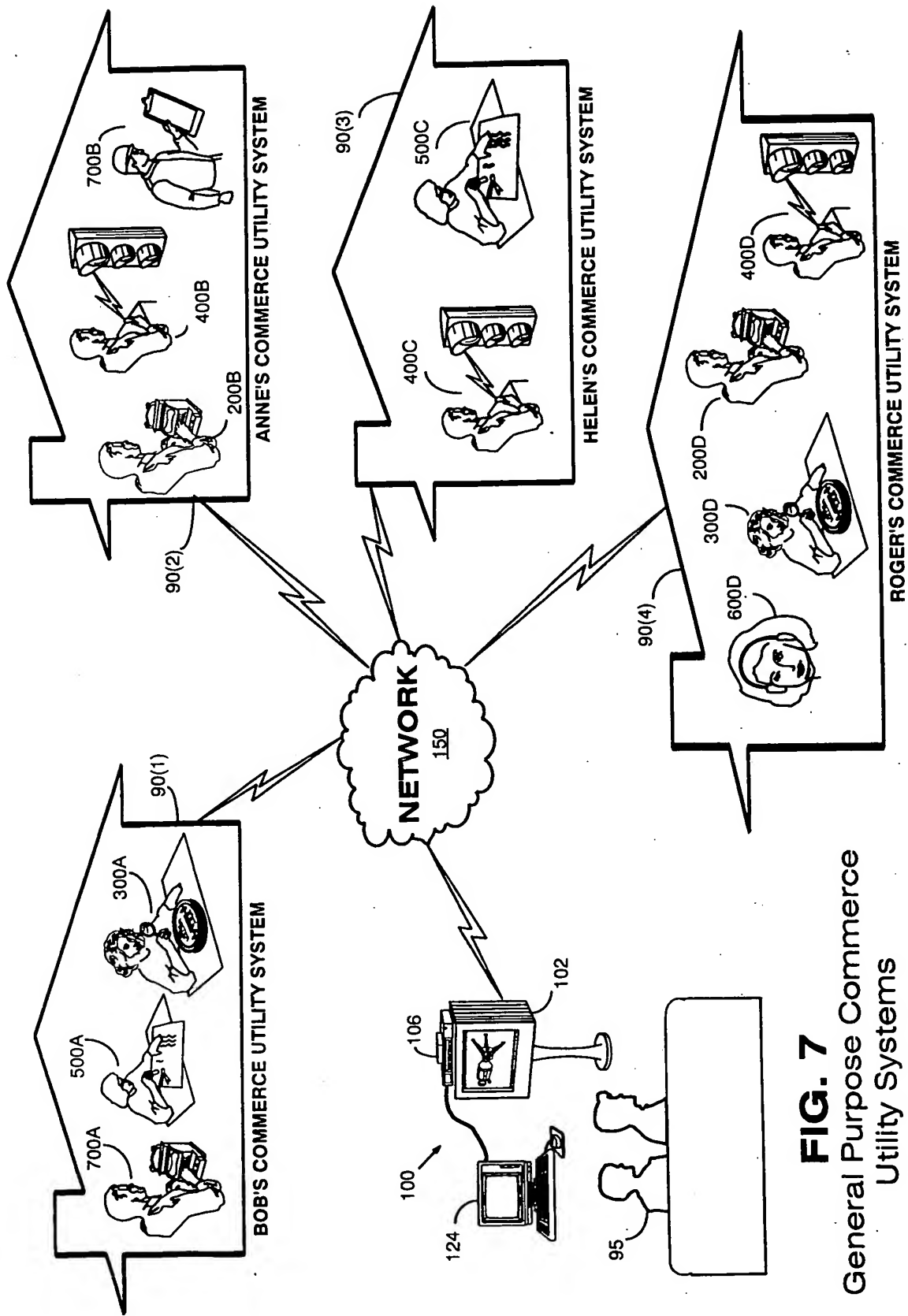


**FIG. 5**

Rights Holders Can Choose Between Commerce Utility Systems

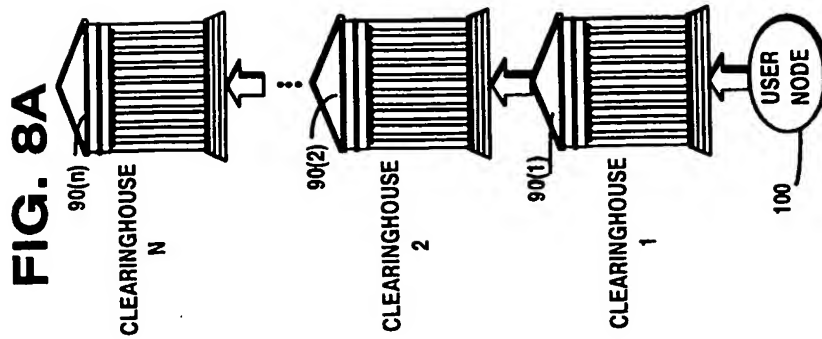
**FIG. 6**  
Different Commerce Utility Systems  
Can Work Together



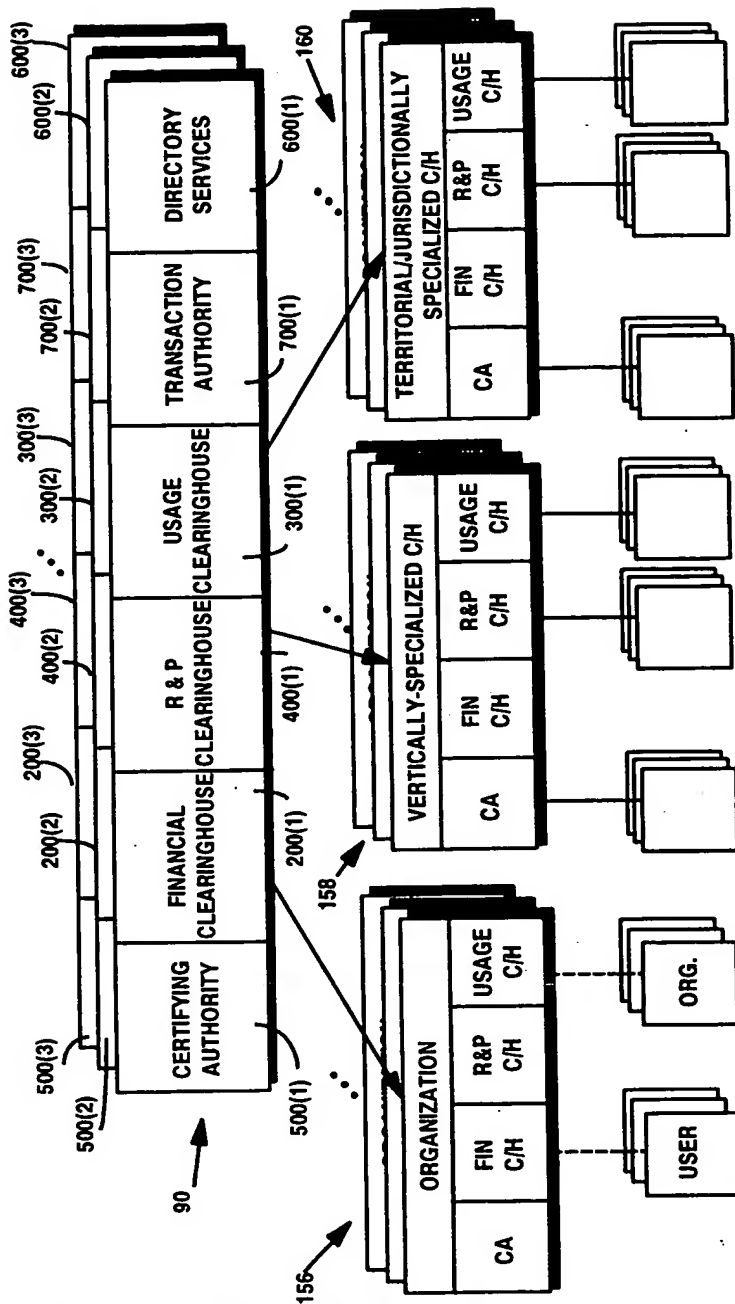


**FIG. 7**  
General Purpose Commerce  
Utility Systems

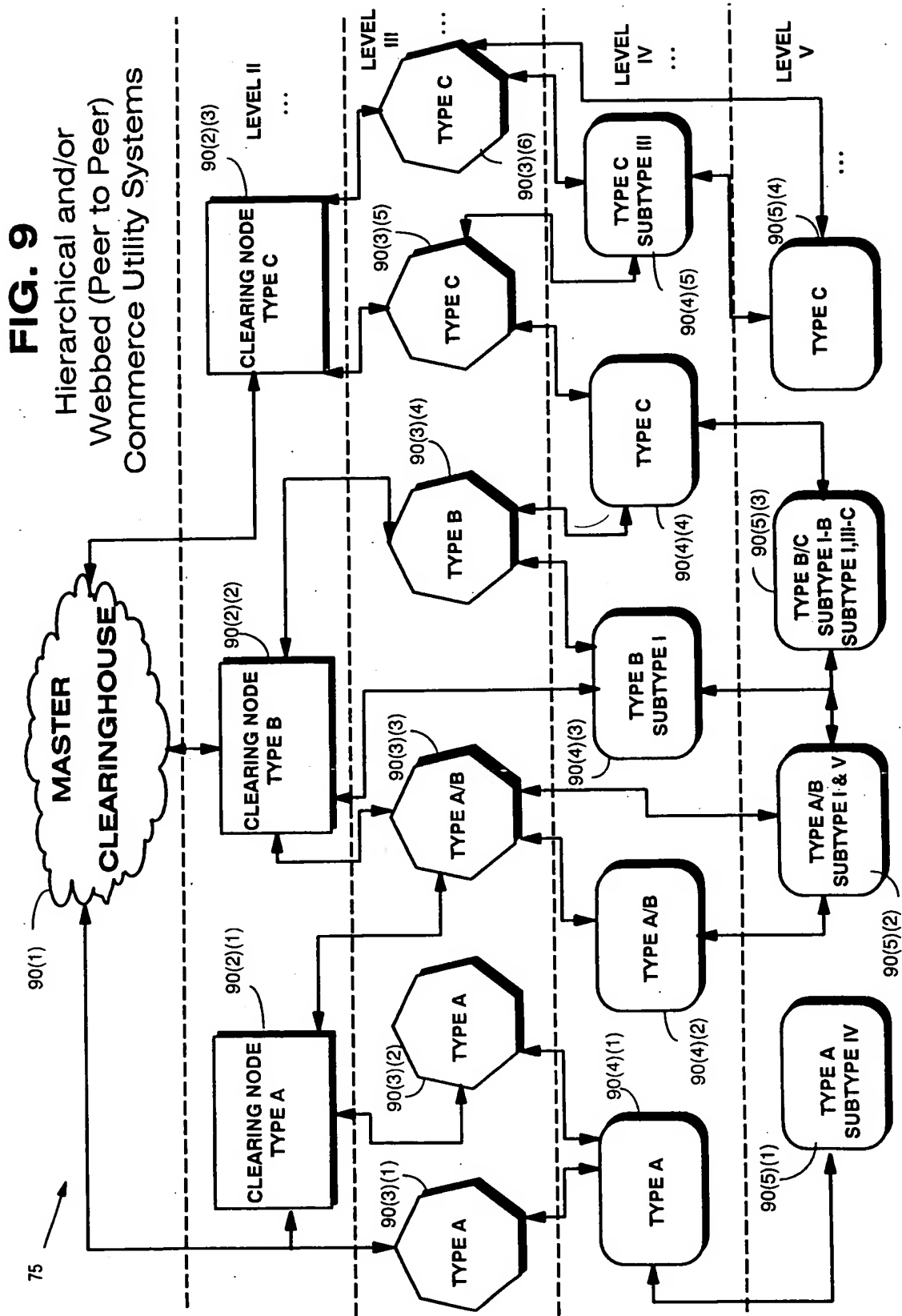




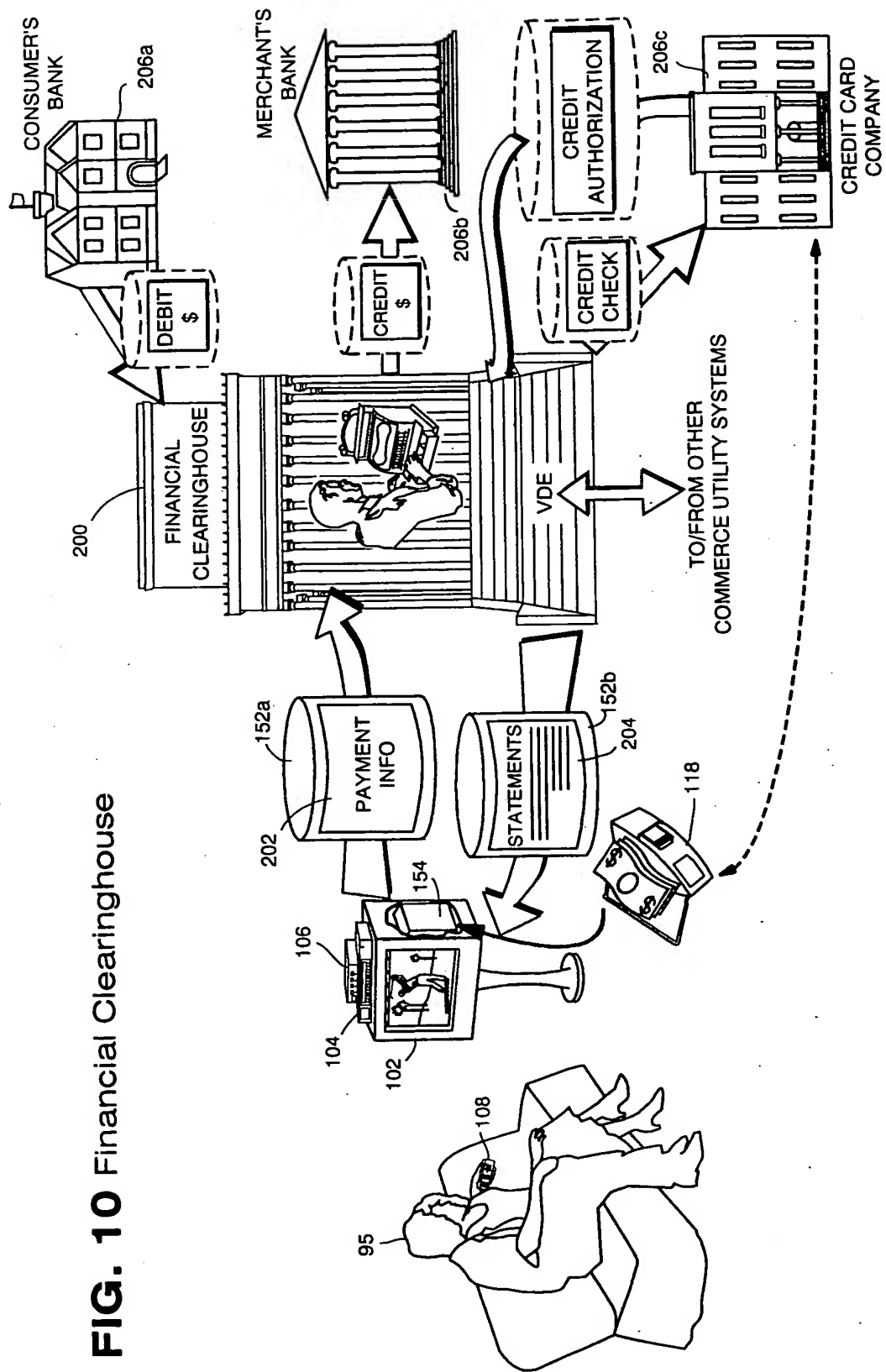
**FIG. 8B**  
Hierarchy Of Commerce  
Utility Systems



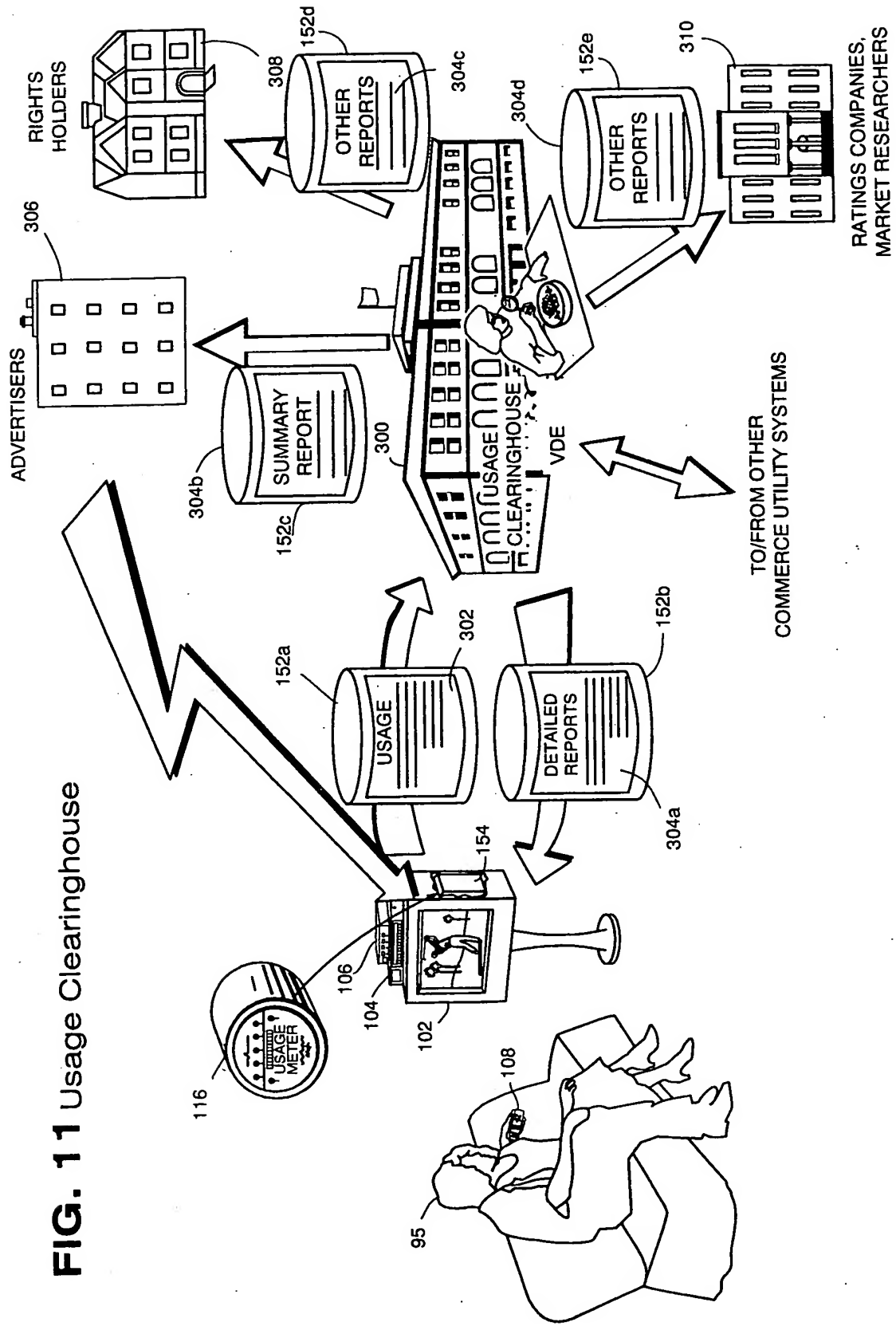




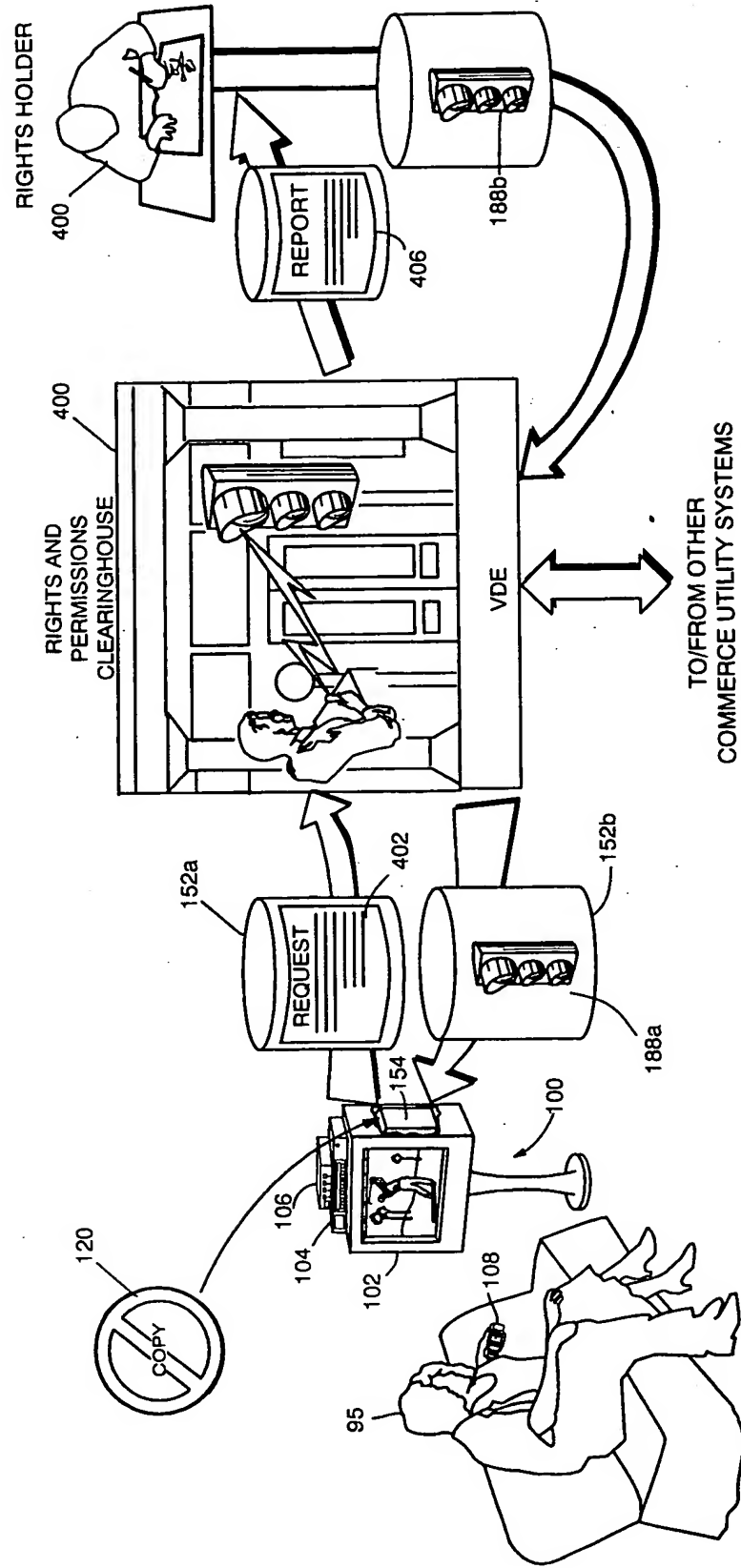
**FIG. 10** Financial Clearinghouse

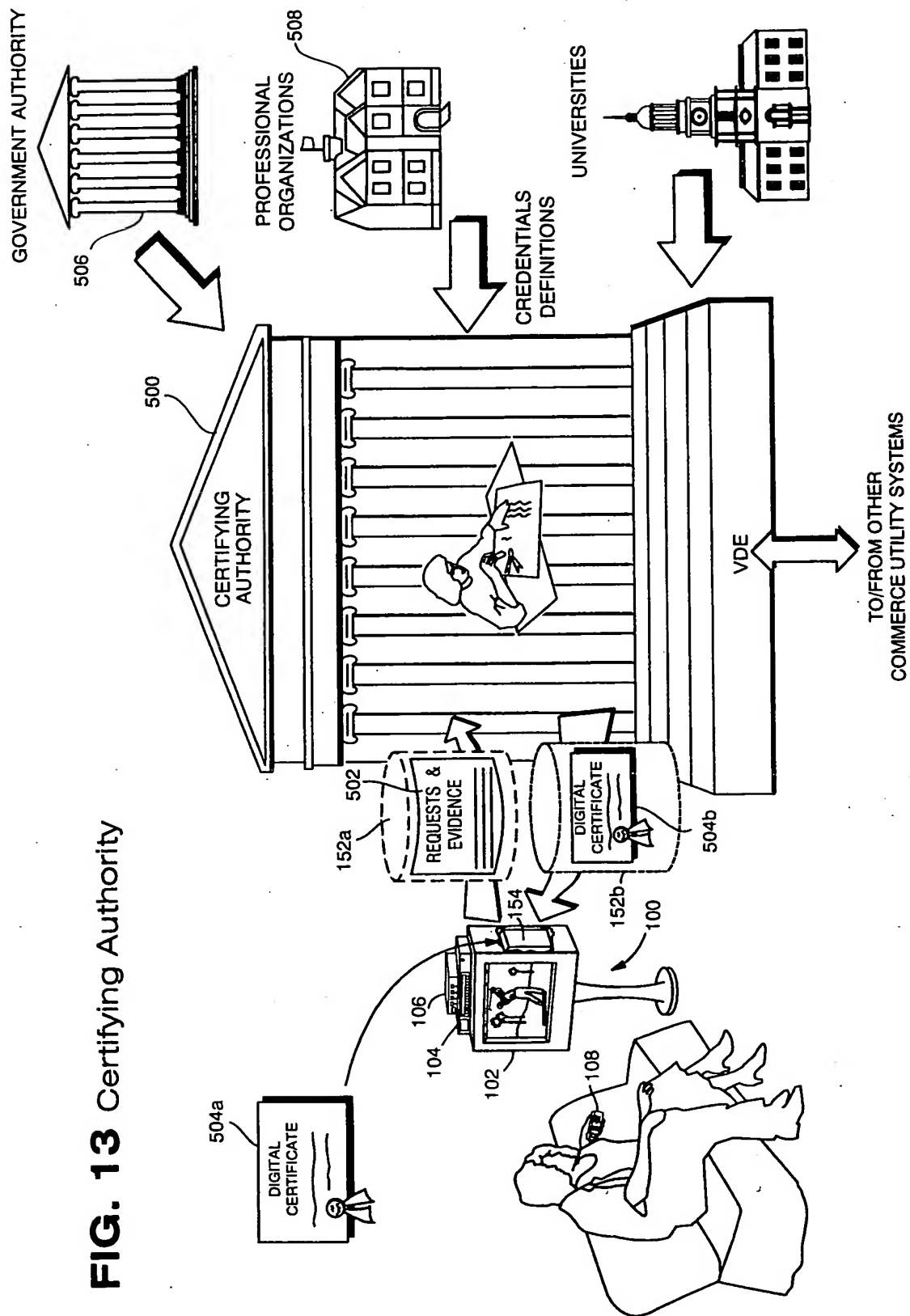


**FIG. 11** Usage Clearinghouse



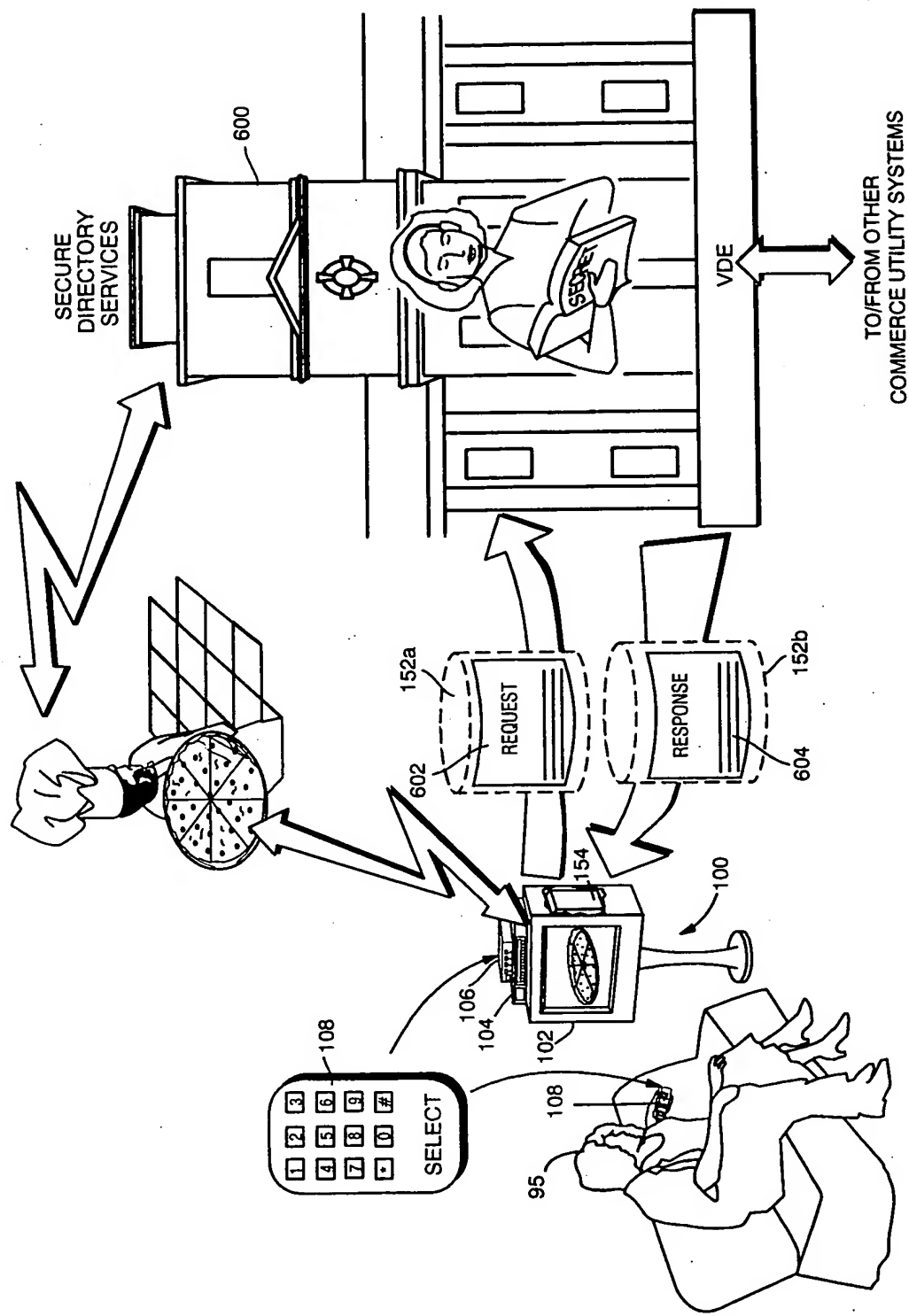
**FIG. 12** Rights and Permissions Clearinghouse





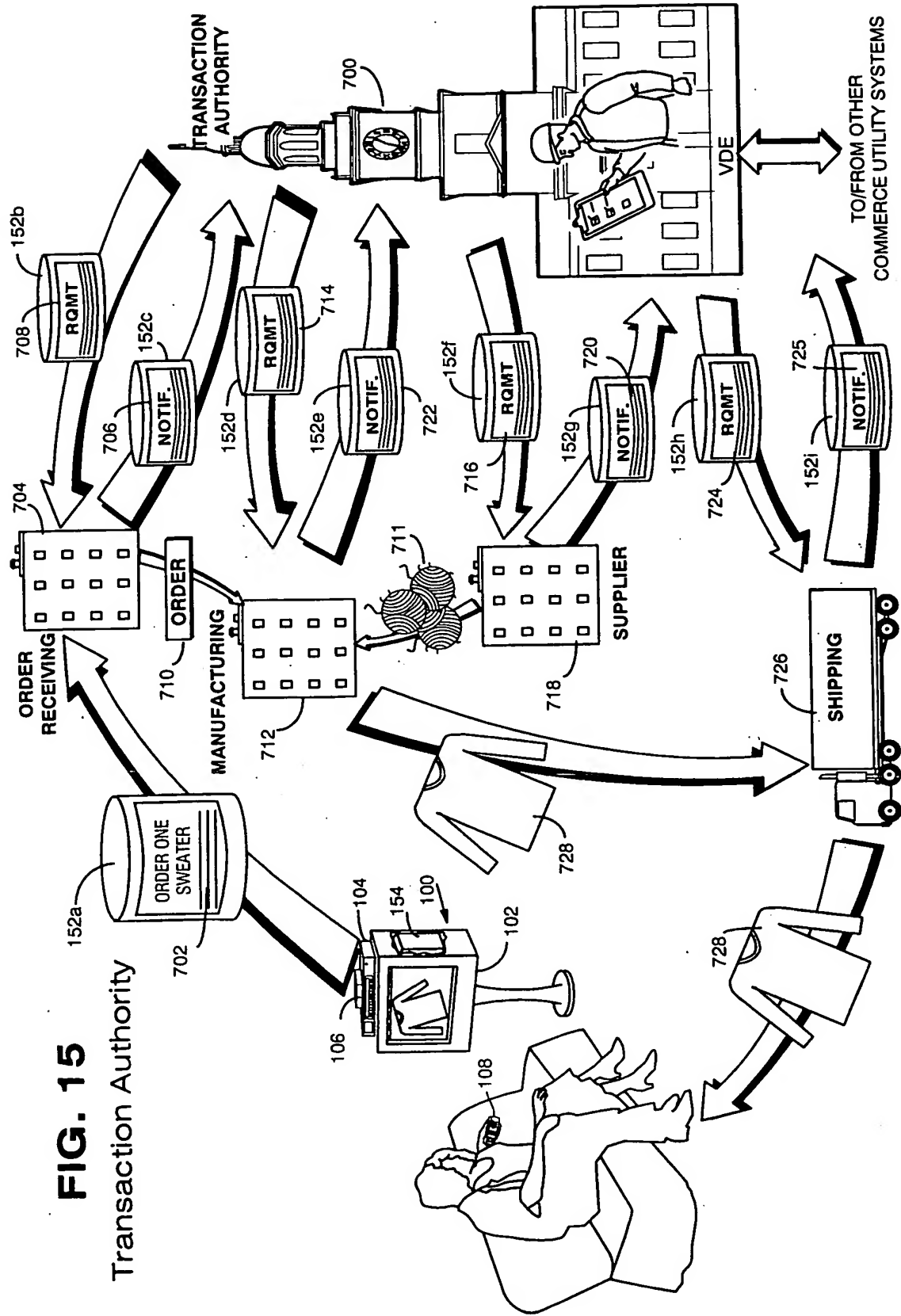
**FIG. 13** Certifying Authority

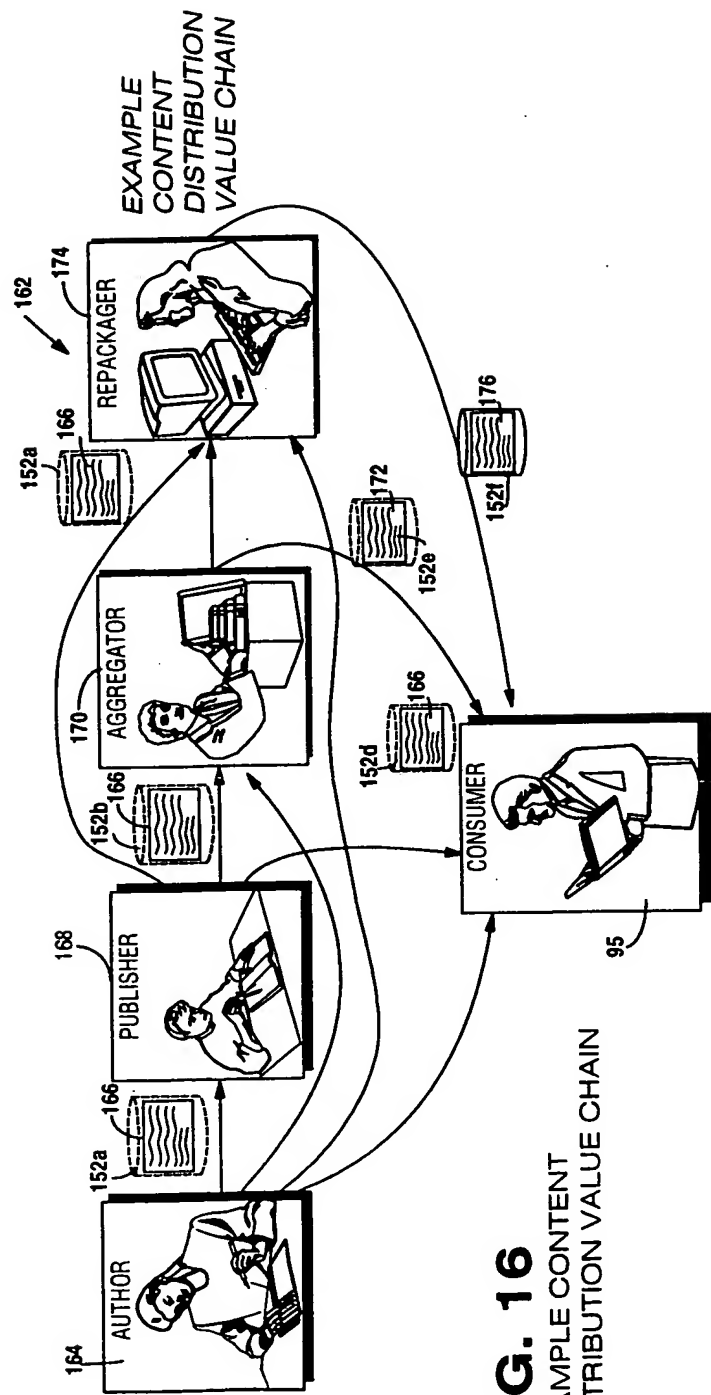
**FIG. 14** Secure Directory Services



**FIG. 15**

Transaction Authority





**FIG. 16**  
EXAMPLE CONTENT  
DISTRIBUTION VALUE CHAIN

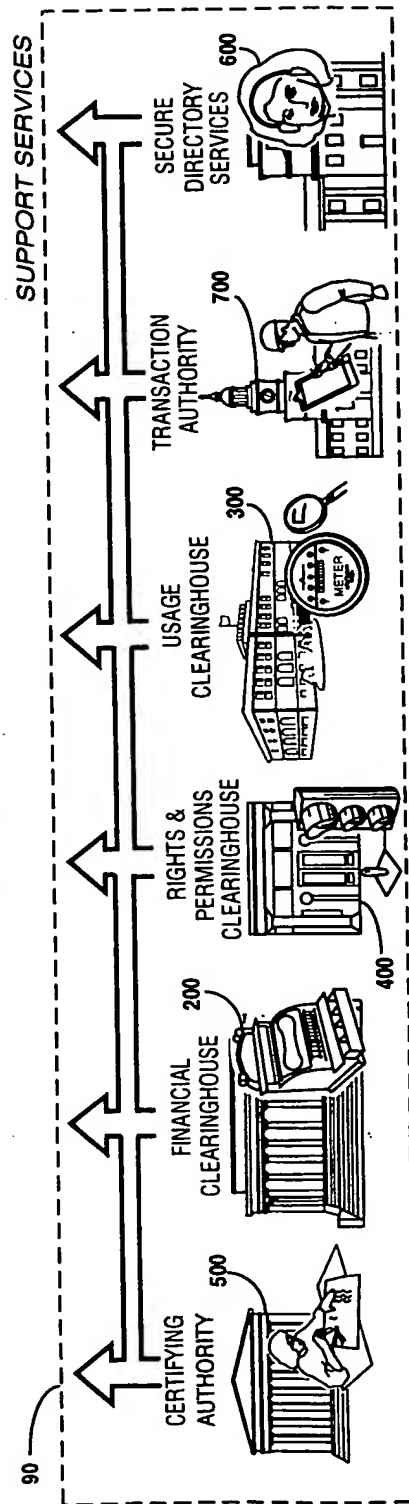




FIG. 16A

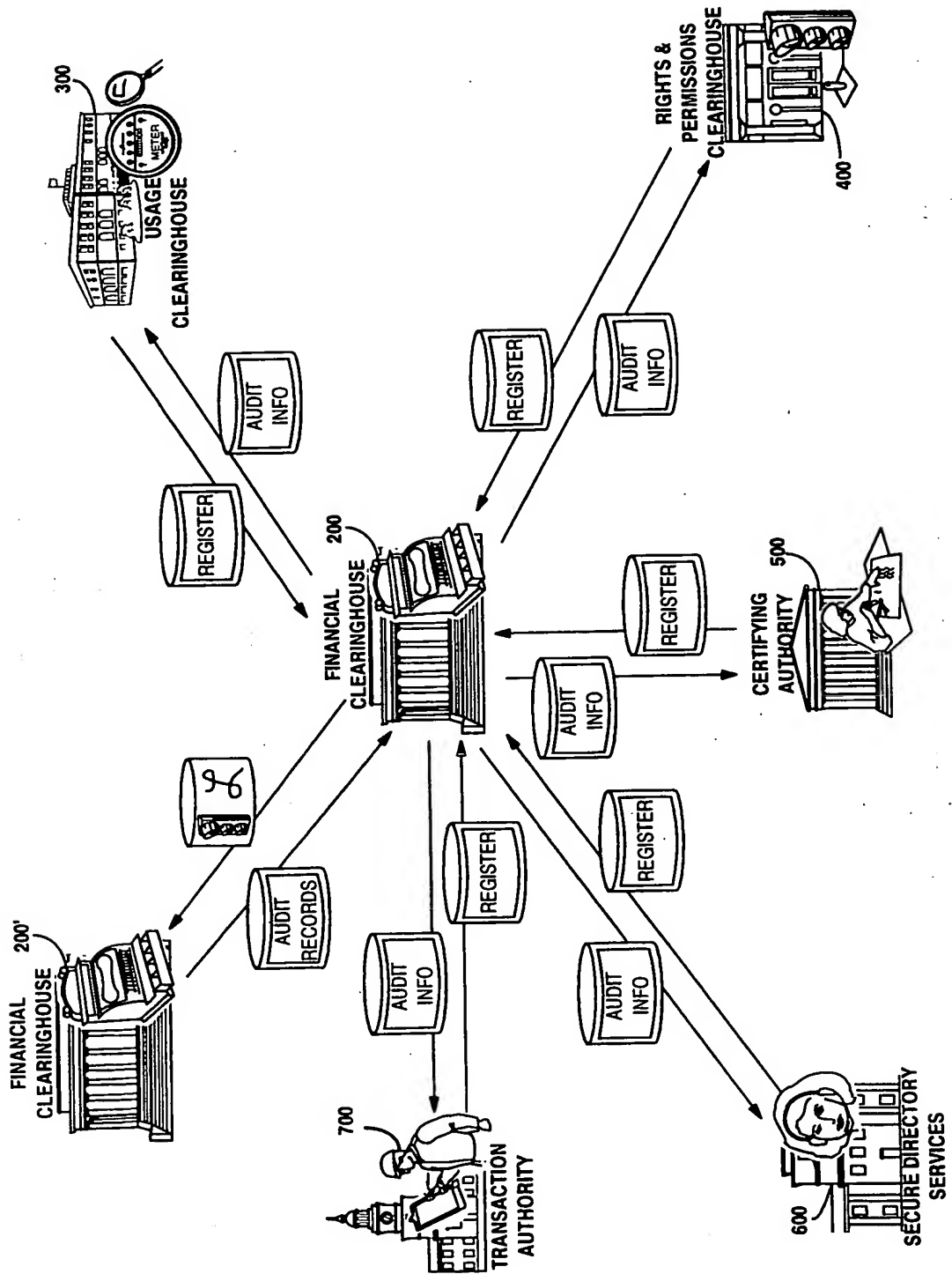


FIG. 16B

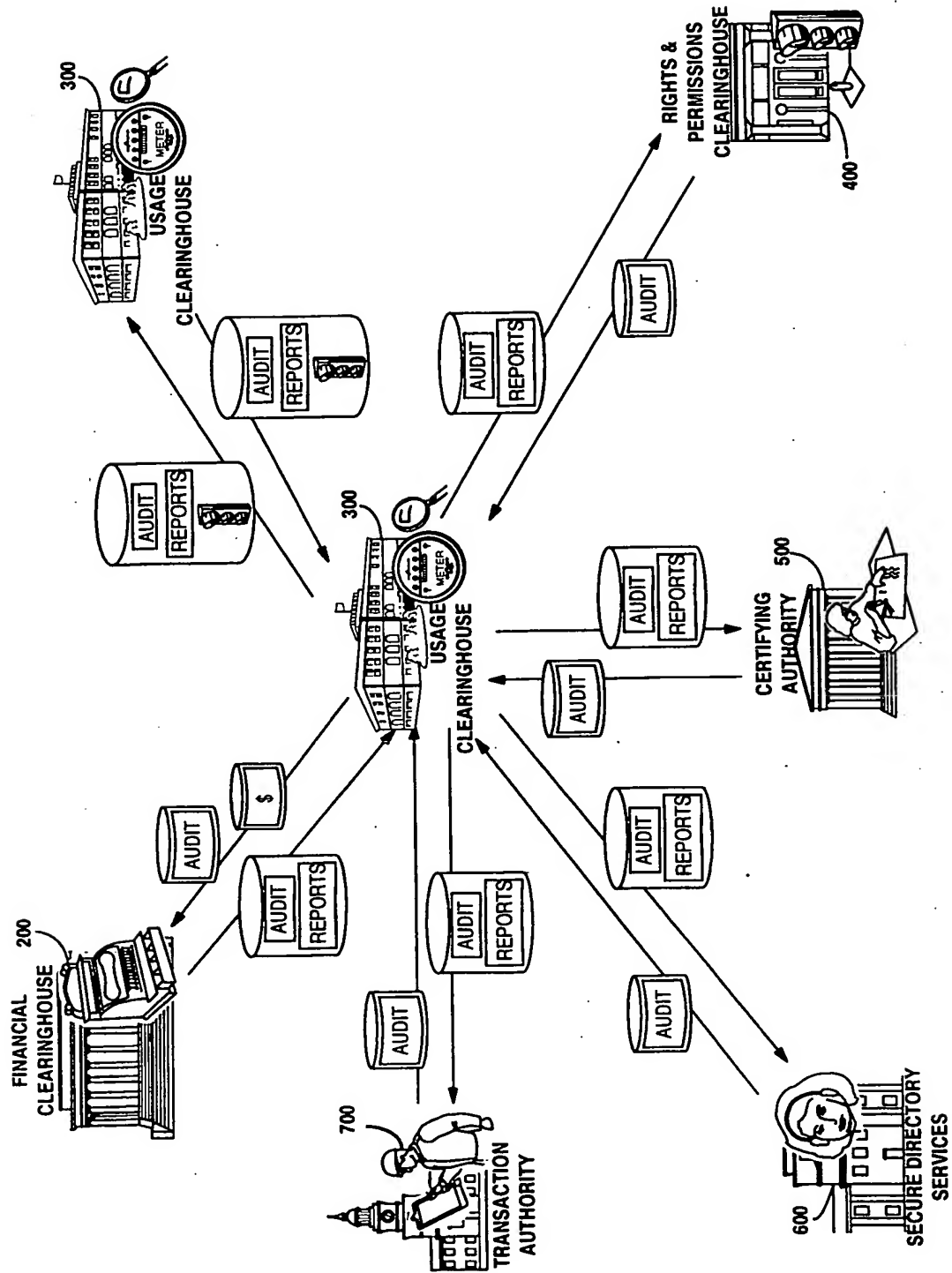


FIG. 16C

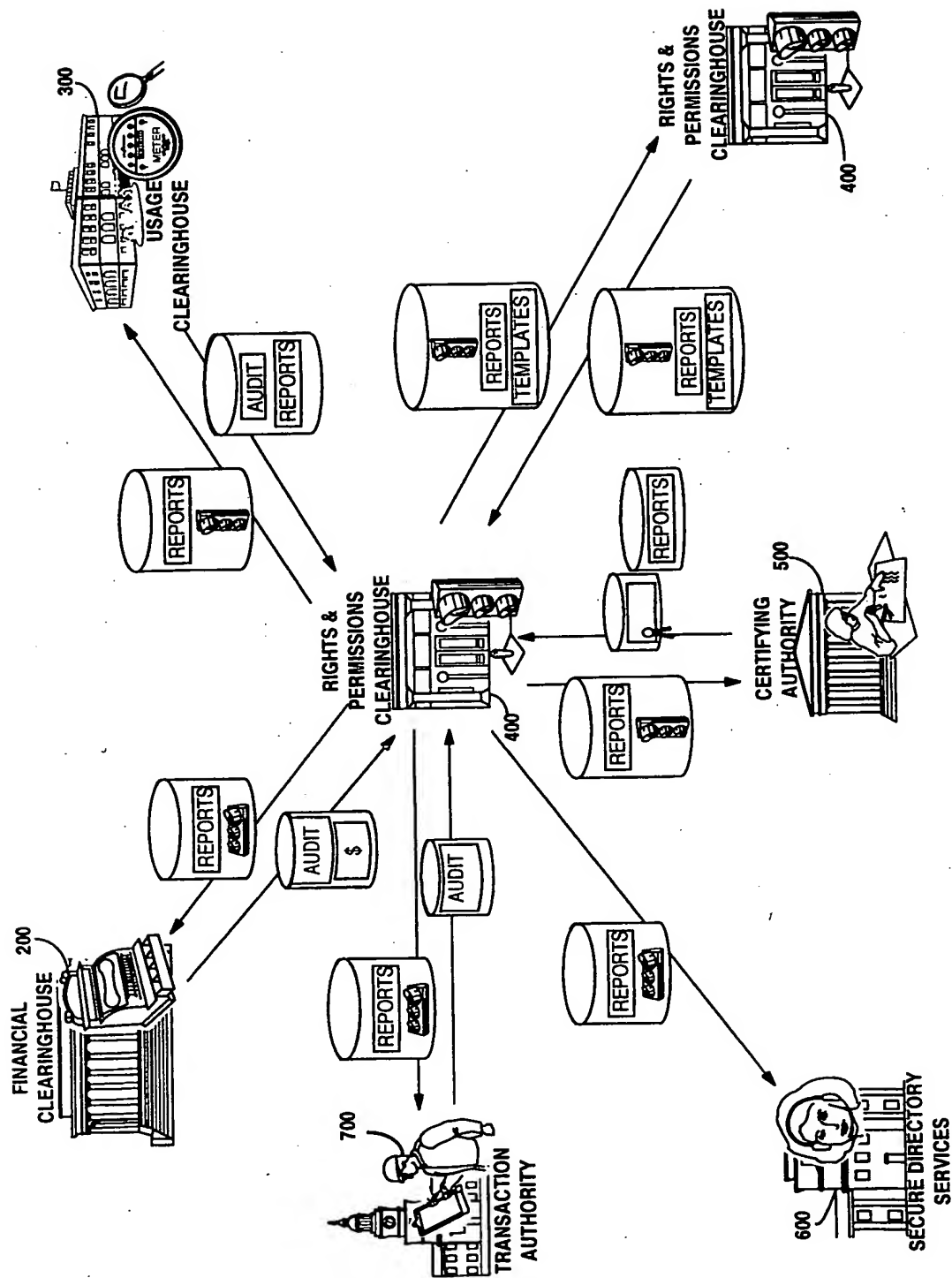


FIG. 16D

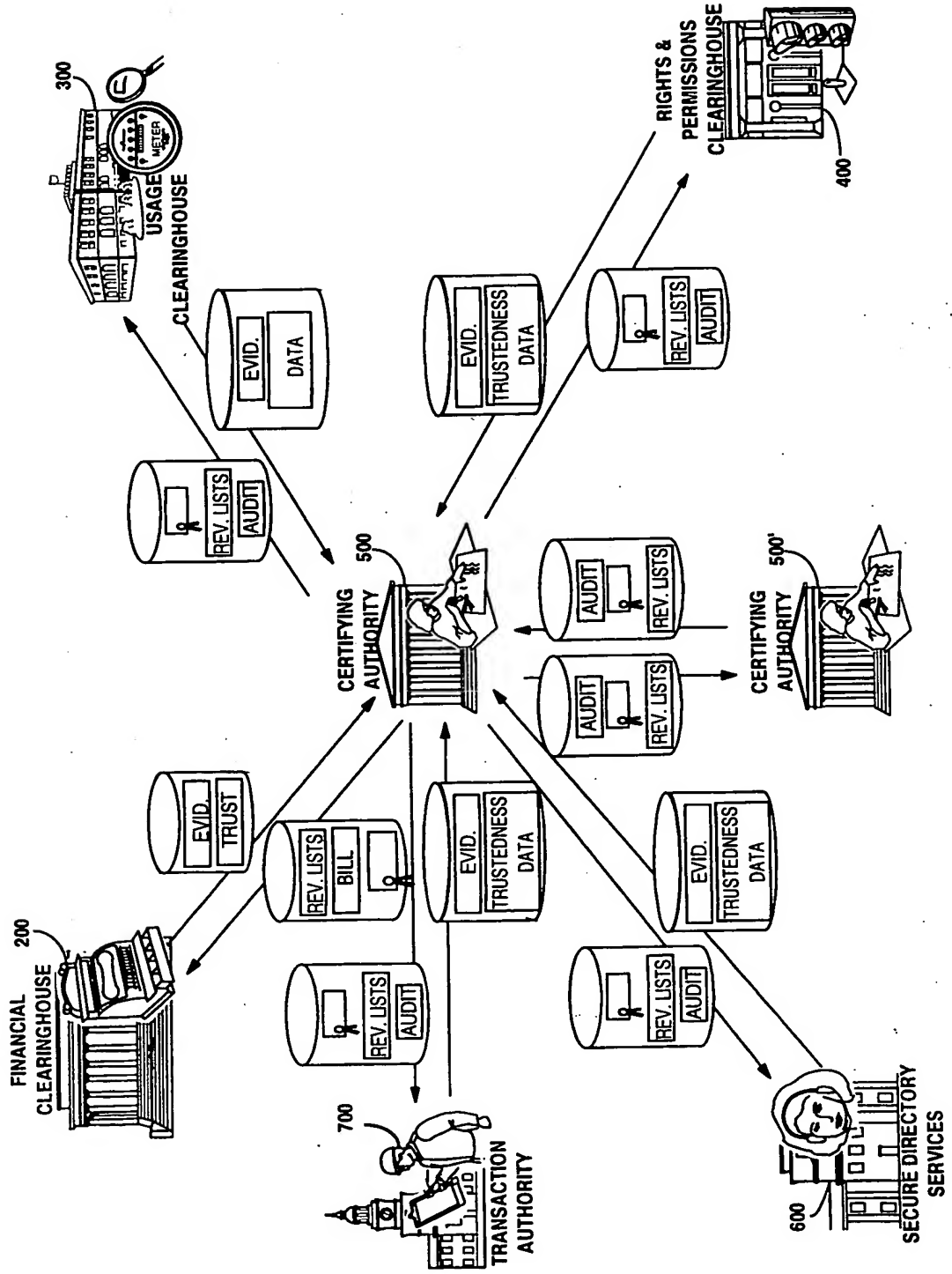


FIG. 16E

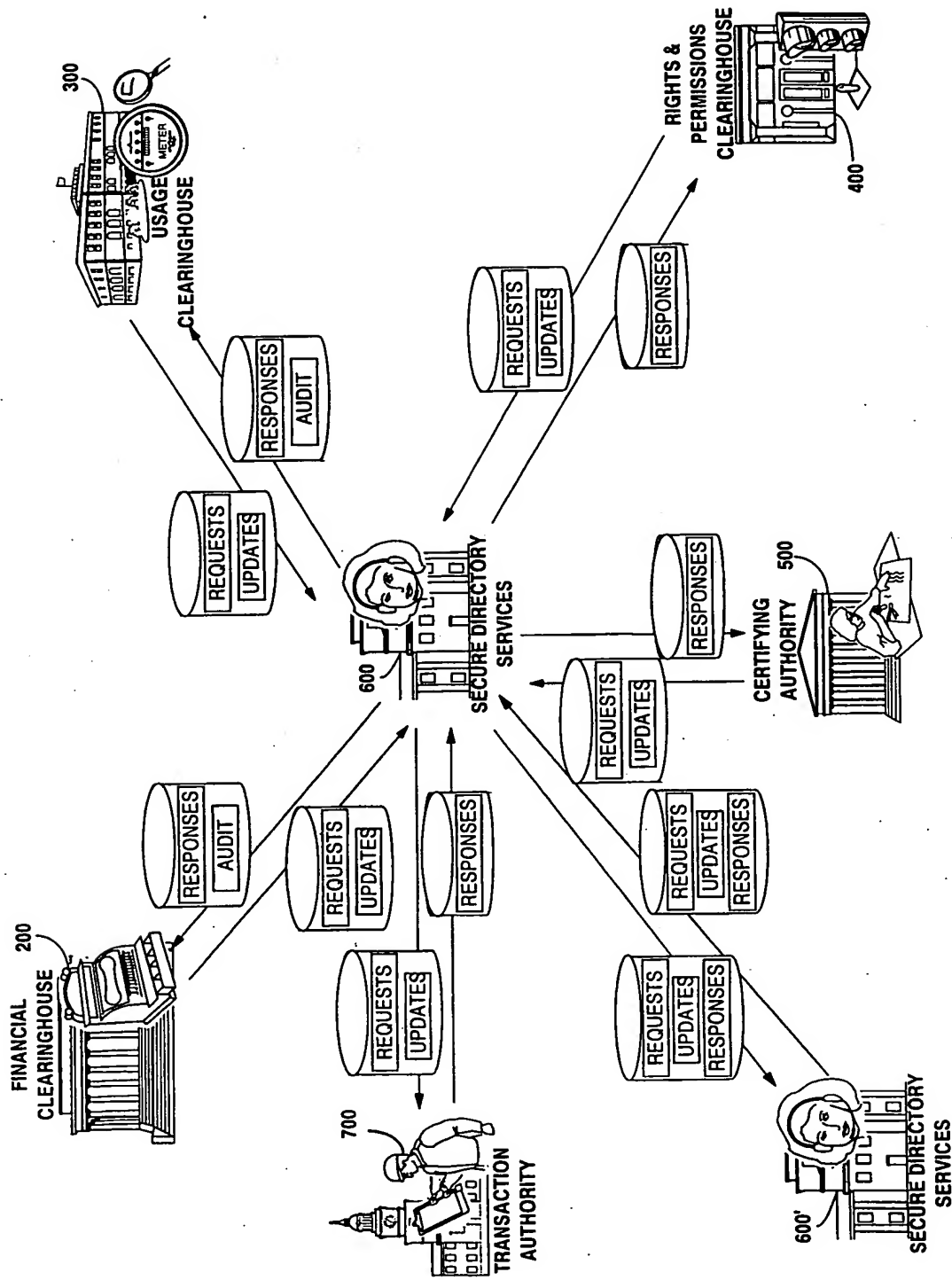
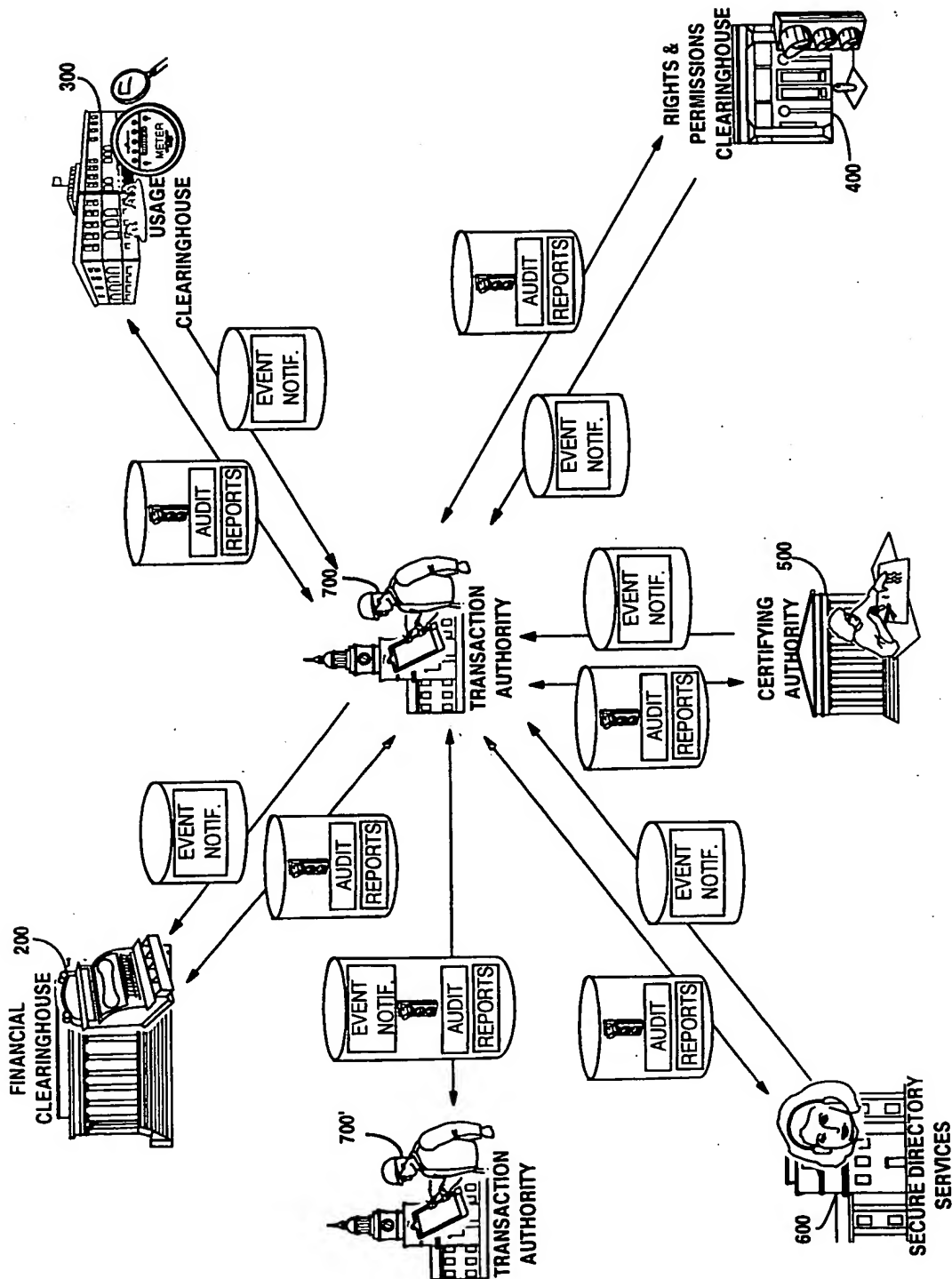
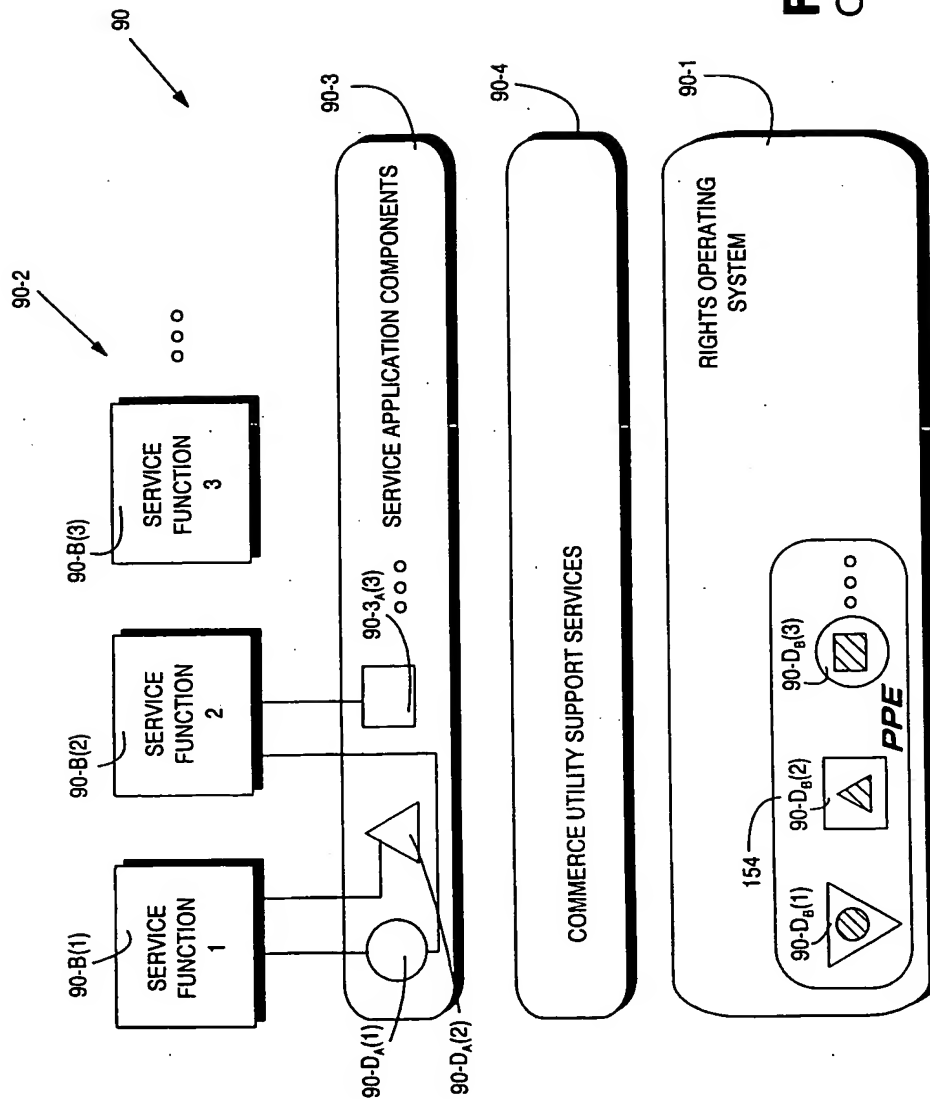
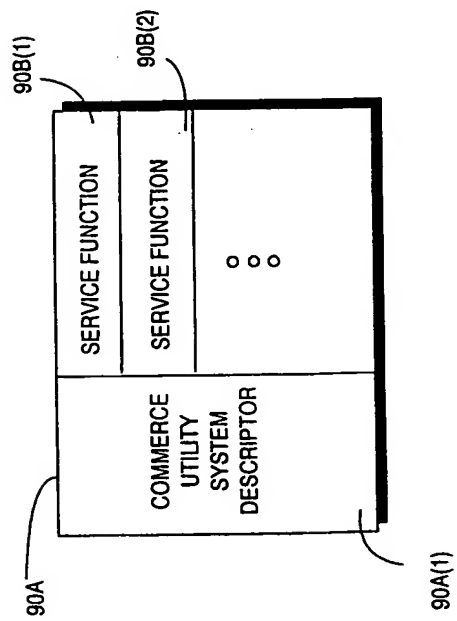


FIG. 16F

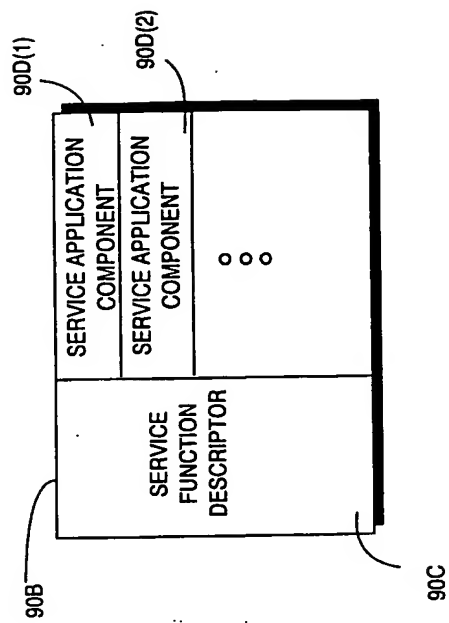




**FIG. 17A**  
Commerce Utility System 90



**FIG. 17B**



**FIG. 17C**

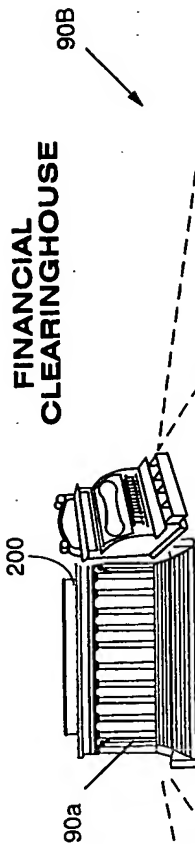


FIG. 17D-1

FINANCIAL CLEARINGHOUSE	USAGE CLEARINGHOUSE	RIGHTS & PERMISSIONS CLEARINGHOUSE	CERTIFICATE AUTHORITY	SECURE DIRECTORY SERVICES	TANGIBLES & PURCHASE & FULFILLMENT	INTANGIBLES & PURCHASE & FULFILLMENT	CONTRACT NEGOTIATIONS & EXECUTION	EDI	SECURE DOCUMENT DELIVERY	BUSINESS PROCESS INTEGRATION	ARBITRATION & MEDIATION	ELECTRONIC ORDERS	ELECTRONIC BANKING & CURRENCY MANAGEMENT	CYBERSPACE TRADING ENVIRONMENTS	...
AUDIT	MAINTAINING RECORDS	STATUS NOTIFICATION	EVENT DATABASE MANAGEMENT	CONTROL SET DATABASE MGMT	NOTARY	OBJECT IDENTIFIER ASSIGNMENT	REVOCACTION LIST MAINTENANCE	CERTIFICATE CREATION	...	...	...	...	...	...	...
OVERSEEING PROCESS	CONFIRMATIONS	ROUTING DATABASE	GENERATE CONTROL SETS	SEAL GENERATOR	DIGITAL TIME STAMP	COPYRIGHT REGISTRATION	...	...	...	...	...	...	...	...	...
MONITORING STATUS	UNCOMPLETED EVENTS RECORD	GENERATING REQUESTS	PROCESS CONTROL LOGIC	...	...	...	...	...	...	...	...	...	...	...	...
COMPLETE PROCESS DEFINITION	REQUIREMENTS GENERATION	REPLICATION	EVENT FLOW GENERATION	FINGERPRINT /WATERMARK	CONTROL SET REGISTRY	...	...	...	...	...	...	...	...	...	...
PROCESS CONTROL	REPORT GENERATION	PROPAGATION	ROUTING	OFFERS & COUNTER OFFERS	TEMPLATE REGISTRY	DIRECTOR DATABASE MANAGEMENT	...	...	...	...	...	...	...	...	...
INTERFACE(S) TO SETTLEMENT SERVICES	FUNDS TRANSFER	EVENT CONSEQUENCES	USAGE DATABASE MANAGEMENT	ARCHIVE	DATABASE QUERY & RESPONSE PROCESSING	...	...	...	...	...	...	...	...	...	...
CURRENCY CONVERSION	TAX CALCULATION & APPLICATION	ACCOUNT RECONCILIATION	BILL CREATION & PROCESSING	RIGHTS & PERMISSION DATABASE MANAGEMENT	ADVERTISING DATABASE MANAGEMENT	...	...	...	...	...	...	...	...	...	...
ACCOUNT CREATION & IDENTIFIER ASSIGNMENT	PAYMENT AGGREGATION	IDENTITY AUTHENTICATION	MARKET RESEARCH	TEMPLATE DATABASE MANAGEMENT	AUTOMATIC CLASS GENERATION	...	...	...	...	...	...	...	...	...	...
PAYMENT DISAGGREGATION	BUDGET PRE-AUTHORIZATION	ELECTRONIC CURRENCY CREATION	NEGOTIATION	COMMERCE MGMT LANGUAGE PROCESSING	AUTOMATIC CLASS ASSIGNMENT	...	...	...	...	...	...	...	...	...	...
...	...	...	RIGHTS MANAGEMENT LANGUAGE PROCESSING	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

90B

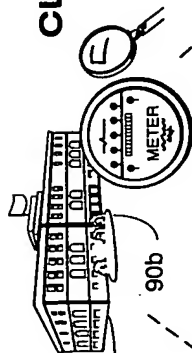
FIG. 17D-2



AUDIT	MAINTAINING RECORDS	STATUS NOTIFICATION	EVENT DATABASE MANAGEMENT	CONTROL SET DATABASE MGMT	NOTARY	OBJECT REGISTRY	CERTIFICATE CREATION	...
OVERSEEING PROCESS	CONFIRMATIONS	ROUTING DATABASE	GENERATE CONTROL SETS	SEAL GENERATOR	OBJECT IDENTIFIER ASSIGNMENT	REVOCATION LIST MAINTENANCE	...	...
MONITORING STATUS	UNCOMPLETED EVENTS RECORD	GENERATING REQUESTS	PROCESS CONTROL LOGIC	DIGITAL TIME STAMP	COPYRIGHT REGISTRATION	...	...	...
COMPLETE PROCESS DEFINITION	REQUIREMENTS GENERATION	REPLICATION	EVENT FLOW GENERATION	FINGERPRINT /WATERMARK	CONTROL SET REGISTRY	...	...	...
PROCESS CONTROL	REPORT GENERATION	PROPAGATION	ROUTING	OFFERS & COUNTER OFFERS	TEMPLATE REGISTRY	DIRECTOR DATABASE MANAGEMENT	...	...
INTERFACE(S) TO SETTLEMENT SERVICES	FUNDS TRANSFER	EVENT CONSEQUENCES	USAGE DATABASE MANAGEMENT	ARCHIVE	DATABASE QUERY & RESPONSE PROCESSING	...	...	...
CURRENCY CONVERSION	TAX CALCULATION & APPLICATION	ACCOUNT RECONCILIATION	BILL CREATION & PROCESSING	RIGHTS & PERMISSION DATABASE MANAGEMENT	ADVERTISING DATABASE MANAGEMENT	...	...	...
ACCOUNT CREATION & IDENTIFIER ASSIGNMENT	PAYMENT AGGREGATION	IDENTITY AUTHENTICATION	MARKET RESEARCH	TEMPLATE DATABASE MANAGEMENT	AUTOMATIC CLASS GENERATION	...	...	...
PAYMENT DISAGGREGATION	BUDGET PRE-AUTHORIZATION	ELECTRONIC CURRENCY CREATION	NEGOTIATION	COMMERCE MGMT LANGUAGE PROCESSING	AUTOMATIC CLASS ASSIGNMENT	...	...	...
:	:	:	RIGHTS MANAGEMENT LANGUAGE PROCESSING	:	:	:	:	:

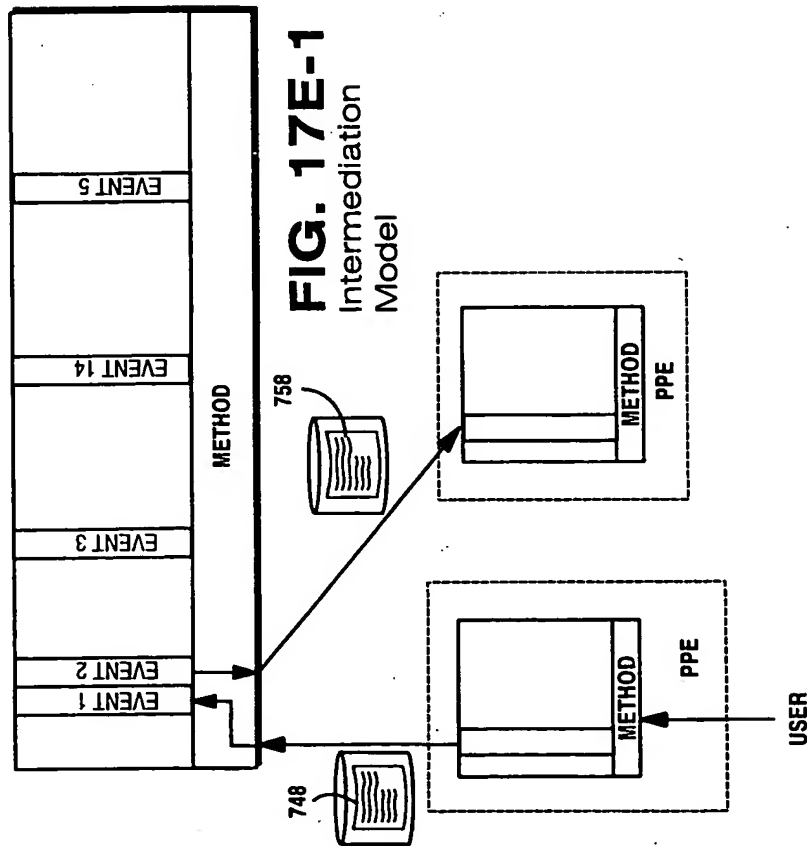
FIG. 17D-3

USAGE  
CLEARINGHOUSE

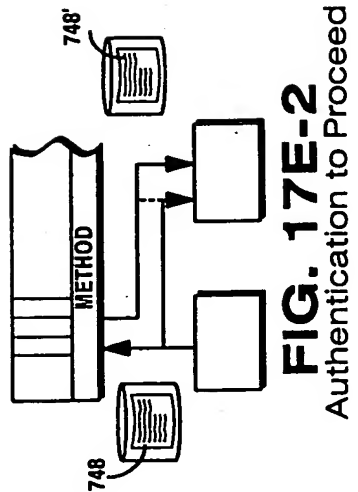


90B

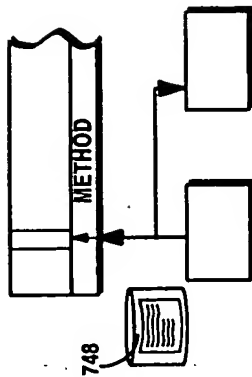
AUDIT	MAINTAINING RECORDS	STATUS NOTIFICATION	EVENT DATABASE MANAGEMENT	CONTROL SET DATABASE MGMT	NOTARY	OBJECT REGISTRY	CERTIFICATE CREATION	...
OVERSEEING PROCESS	CONFIRMATIONS	ROUTING DATABASE	GENERATE CONTROL SETS	SEAL GENERATOR	OBJECT IDENTIFIER ASSIGNMENT	REVOCATION LIST MAINTENANCE	...	...
MONITORING STATUS	UNCOMPLETED EVENTS RECORD	GENERATING REQUESTS	PROCESS CONTROL LOGIC	DIGITAL TIME STAMP	COPYRIGHT REGISTRATION	...	...	...
COMPLETE PROCESS DEFINITION	REQUIREMENTS GENERATION	REPLICATION	EVENT FLOW GENERATION	FINGERPRINT /WATERMARK	CONTROL SET REGISTRY	...	...	...
PROCESS CONTROL	REPORT GENERATION	PROPAGATION	ROUTING	OFFERS & COUNTER OFFERS	TEMPLATE REGISTRY	DIRECTOR DATABASE MANAGEMENT	...	...
INTERFACE(S) TO SETTLEMENT SERVICES	FUNDS TRANSFER	EVENT CONSEQUENCES	USAGE DATABASE MANAGEMENT	ARCHIVE	DATABASE QUERY & RESPONSE PROCESSING	...	...	...
CURRENCY CONVERSION	TAX CALCULATION & APPLICATION	ACCOUNT RECONCILIATION	BILL CREATION & PROCESSING	RIGHTS & PERMISSION DATABASE MANAGEMENT	ADVERTISING DATABASE MANAGEMENT	...	...	...
ACCOUNT CREATION & IDENTIFIER ASSIGNMENT	PAYMENT AGGREGATION	IDENTITY AUTHENTICATION	MARKET RESEARCH	TEMPLATE DATABASE MANAGEMENT	AUTOMATIC CLASS GENERATION	...	...	...
PAYMENT DISAGGREGATION	BUDGET PRE-AUTHORIZATION	ELECTRONIC CURRENCY CREATION	NEGOTIATION	COMMERCE MGMT LANGUAGE PROCESSING	AUTOMATIC CLASS ASSIGNMENT	...	...	...
:	:	:	RIGHTS MANAGEMENT LANGUAGE PROCESSING	:	:	:	:	:



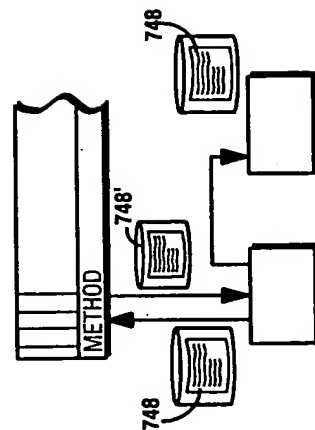
**FIG. 17E-1**  
Intermediation Model



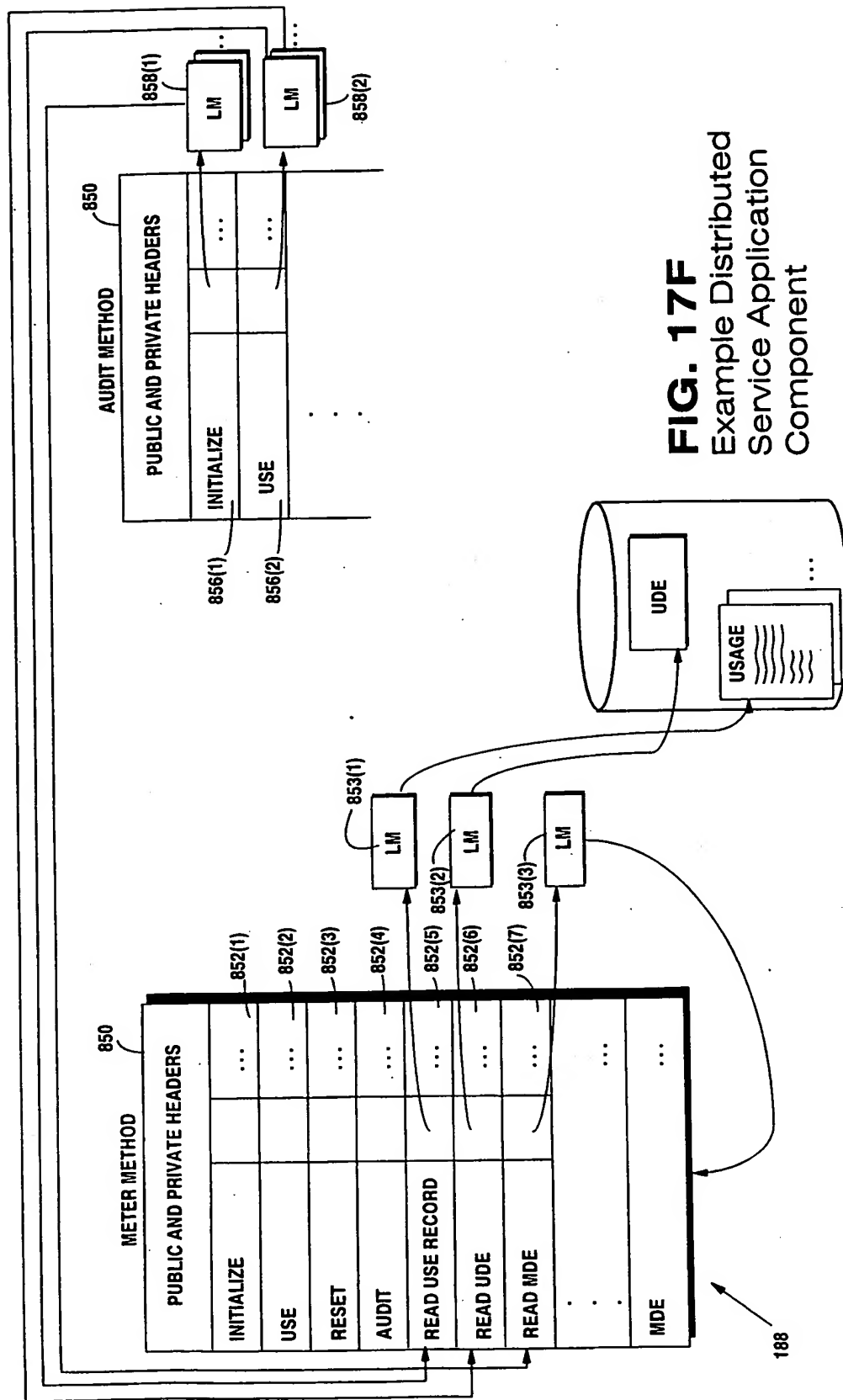
**FIG. 17E-2**  
Authentication to Proceed



**FIG. 17E-3**  
Notification Model

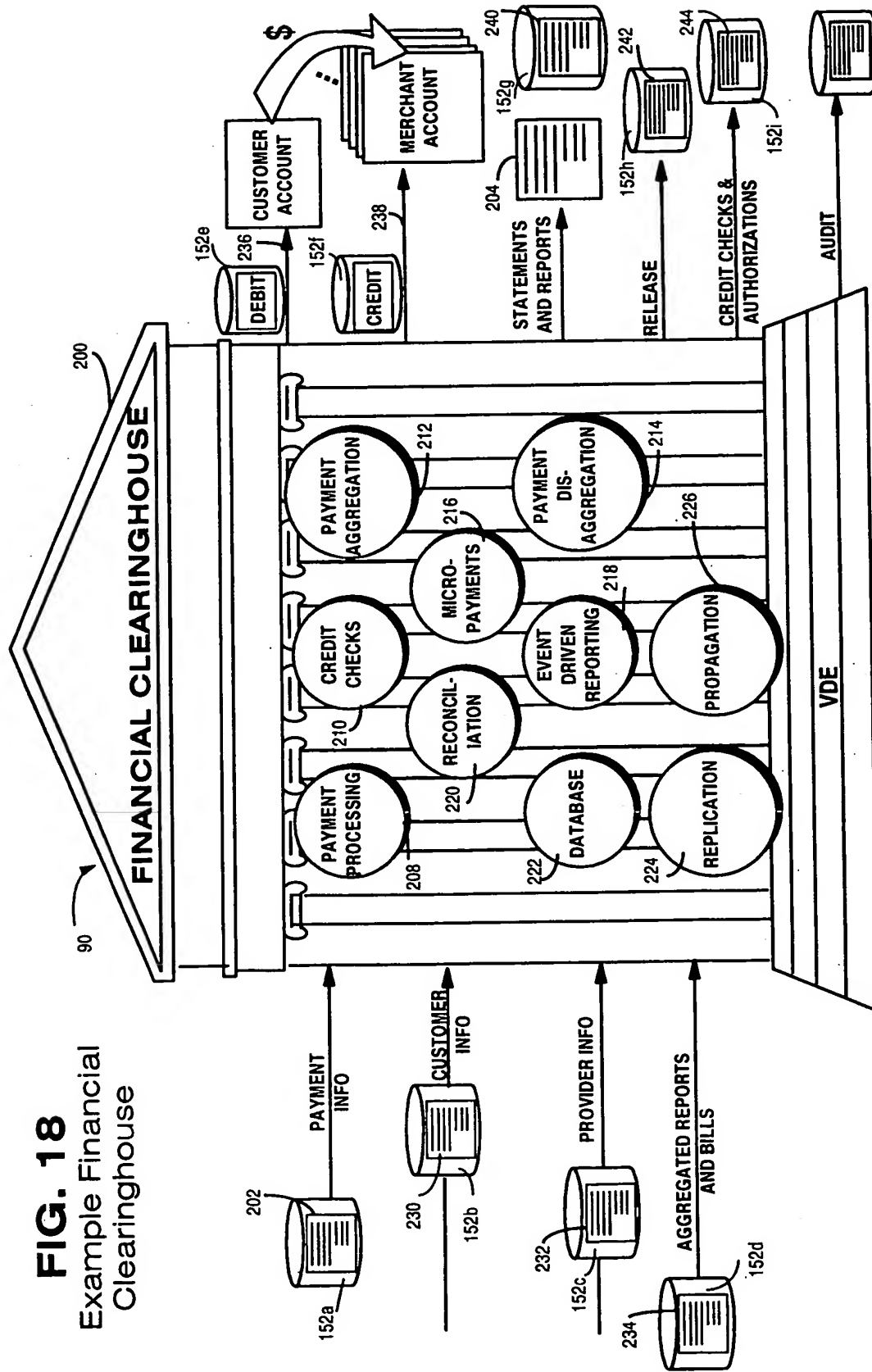


**FIG. 17E-4**  
Prior Authorization Model

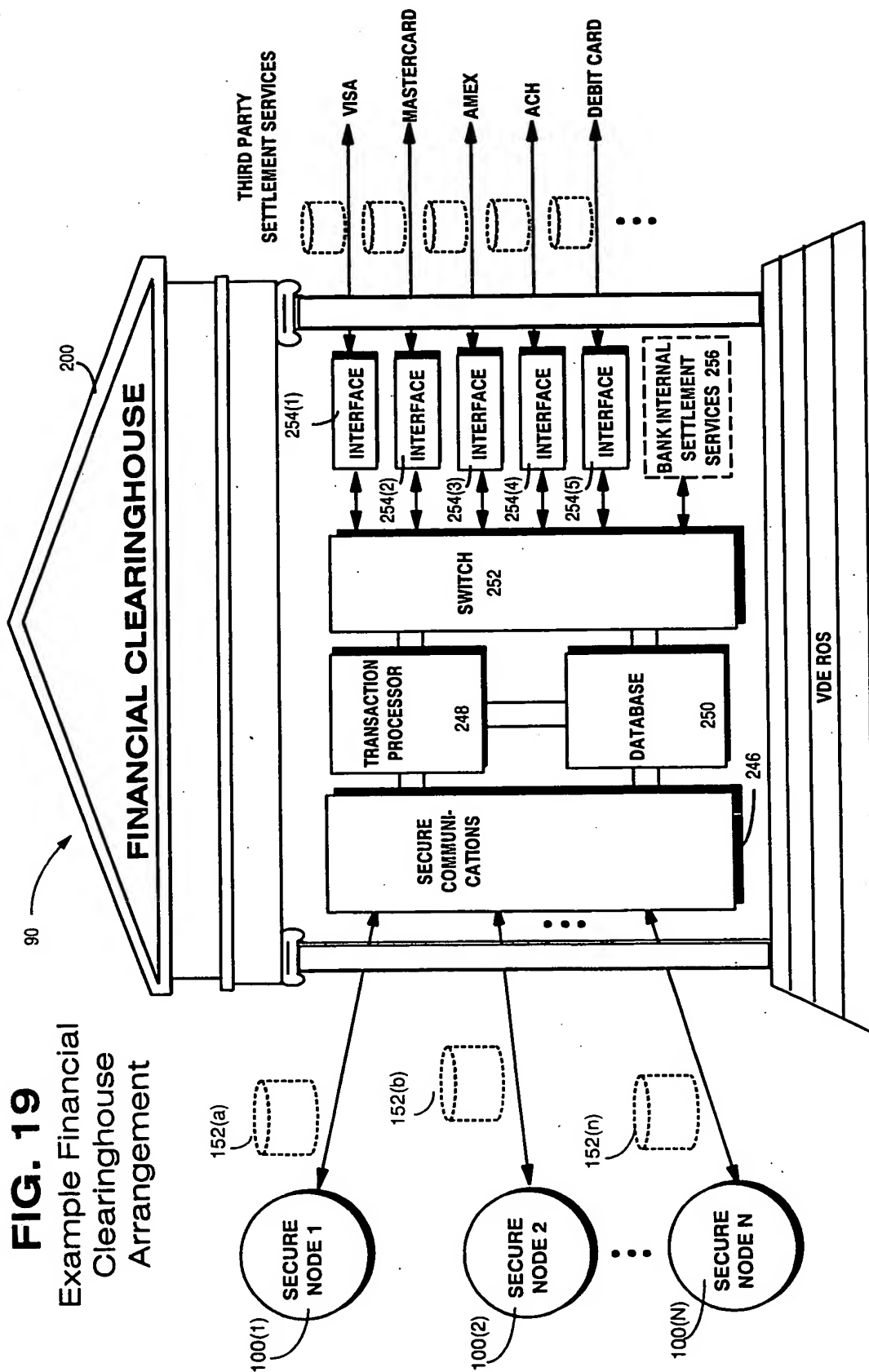


**FIG. 17F**  
Example Distributed  
Service Application  
Component

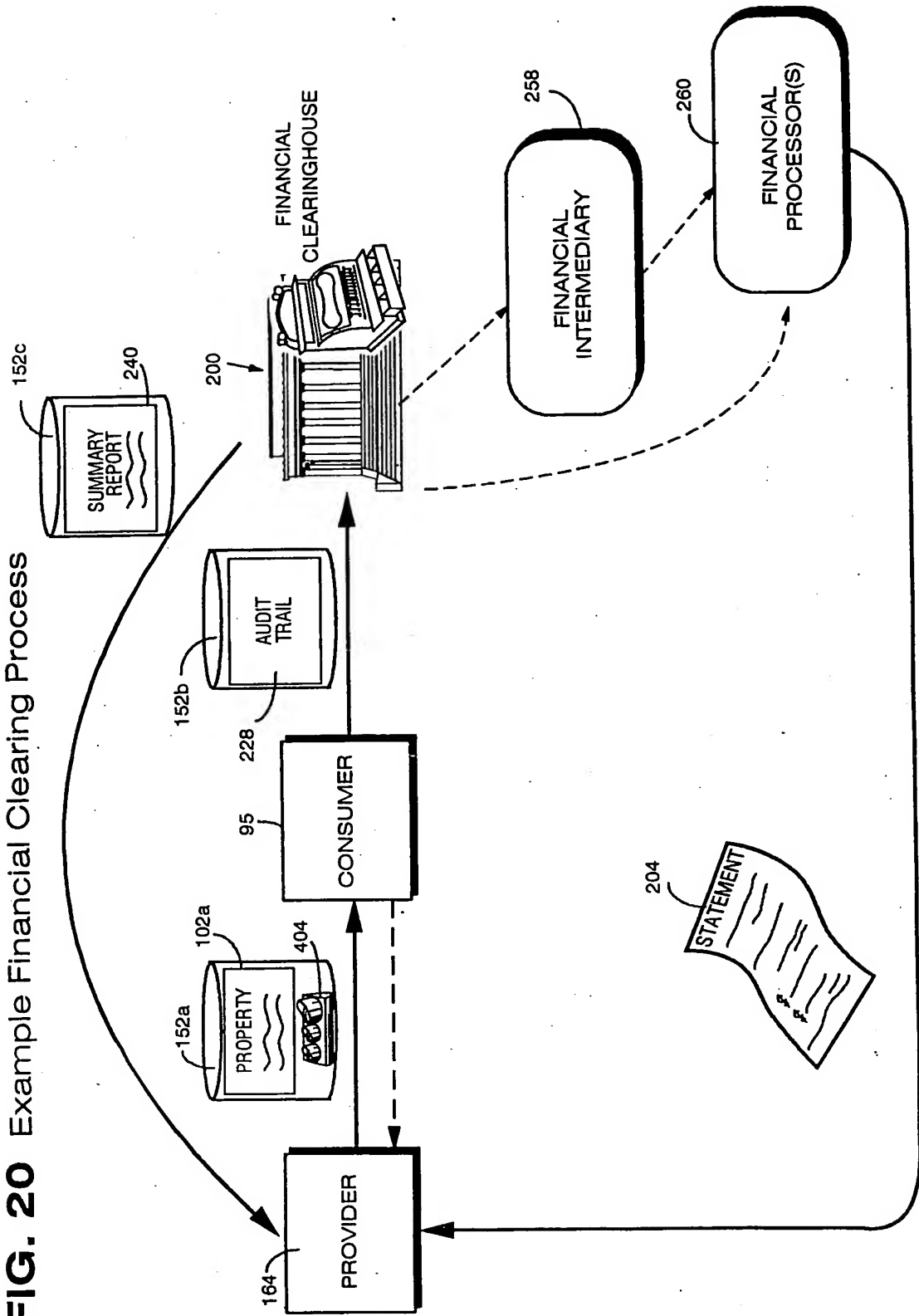
**FIG. 18**  
Example Financial  
Clearinghouse



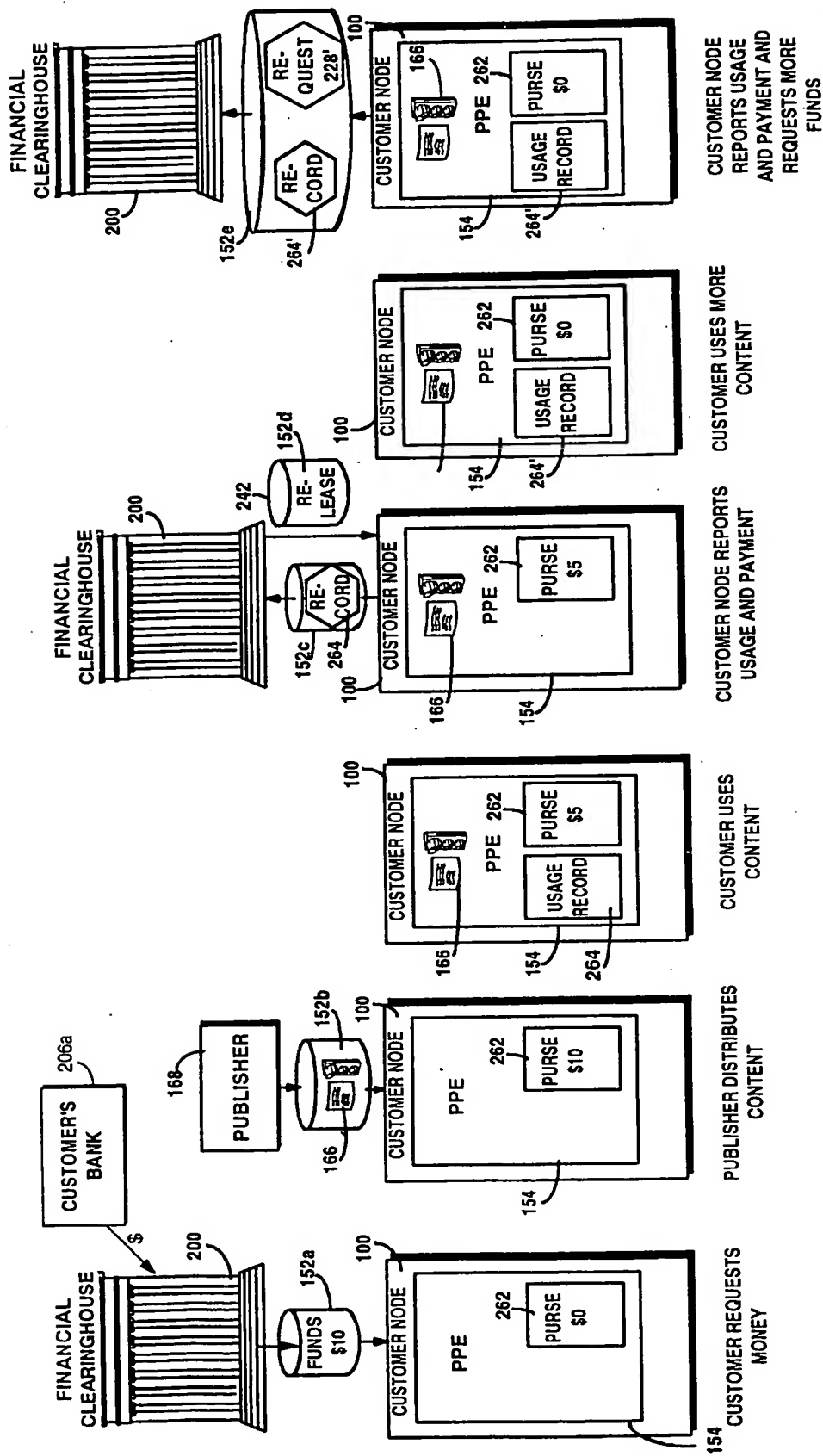
**FIG. 19**  
Example Financial  
Clearinghouse  
Arrangement



**FIG. 20** Example Financial Clearing Process

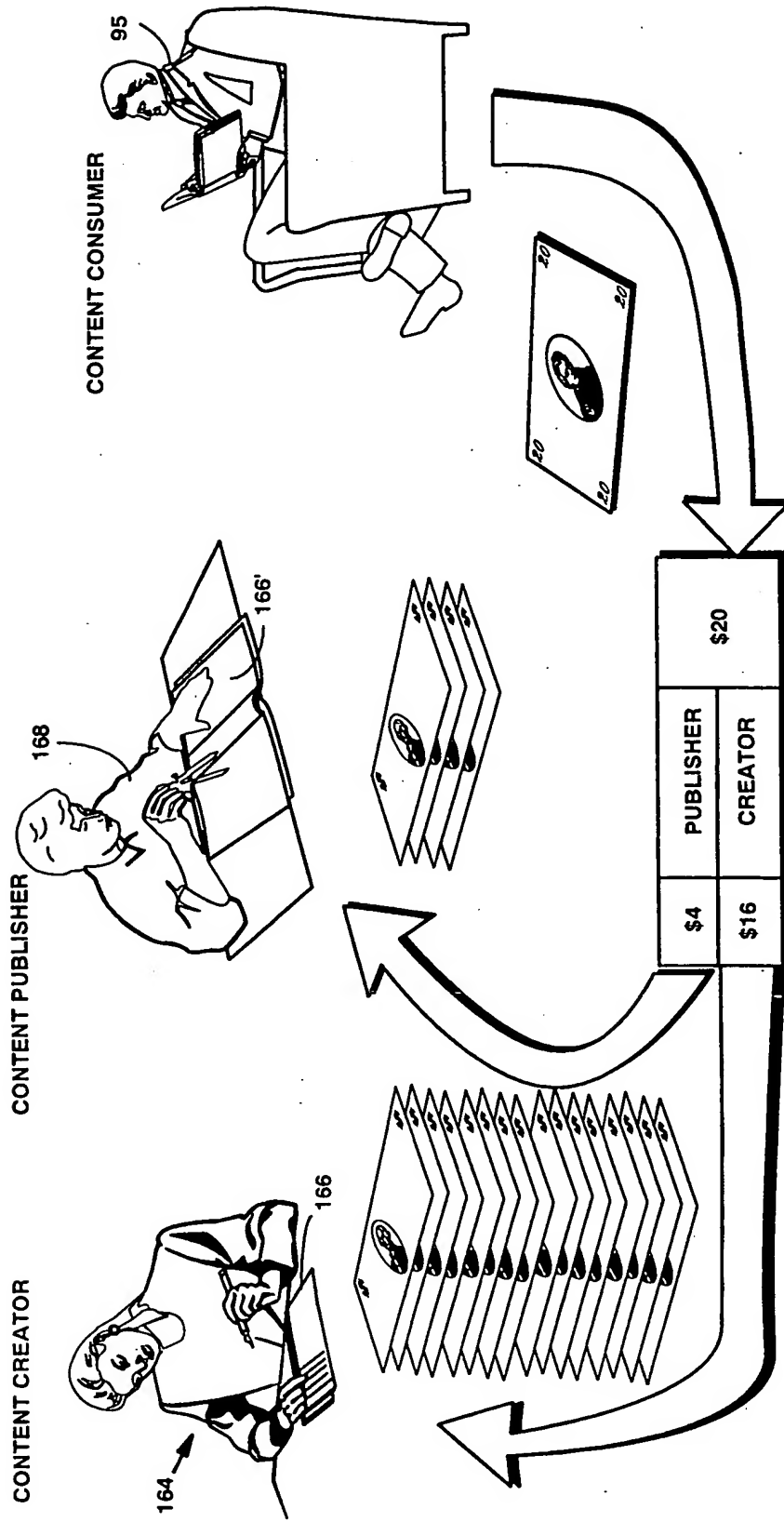




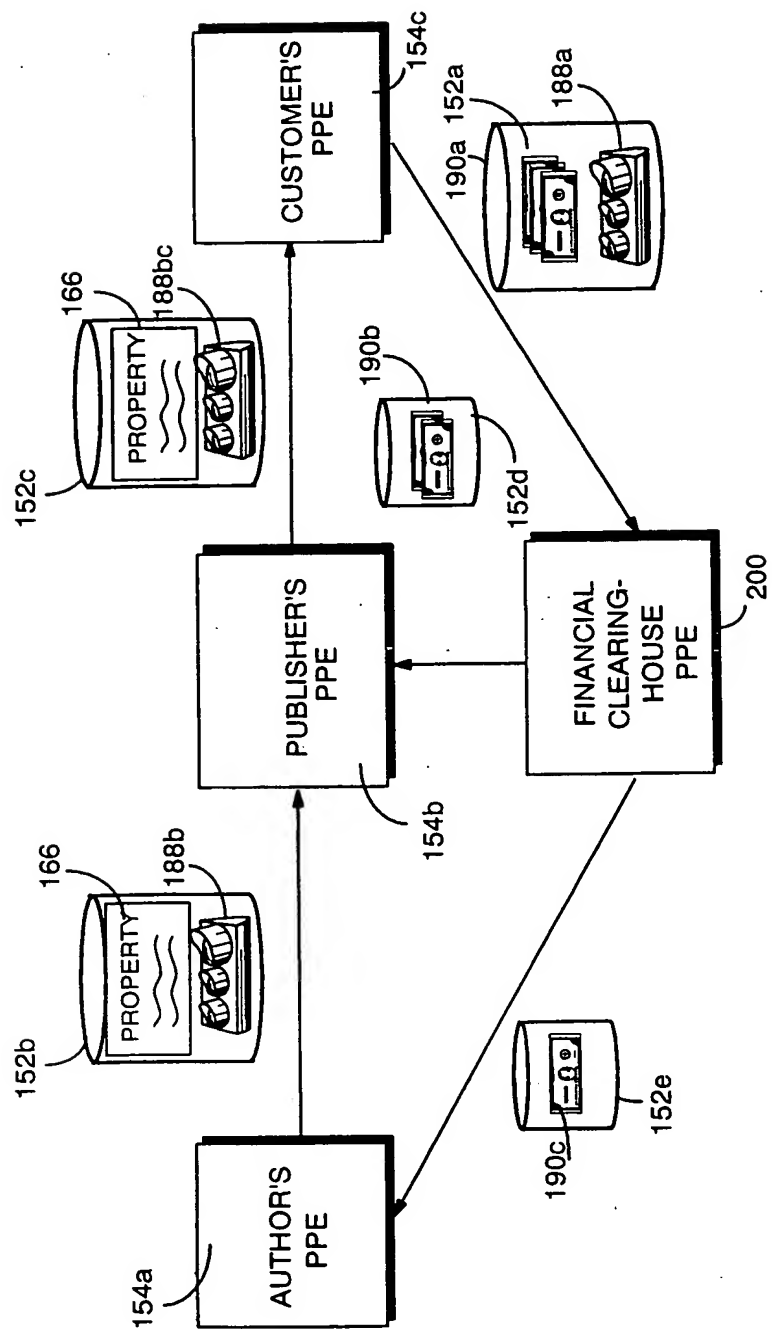


**FIG. 20A** **FIG. 20B** **FIG. 20C** **FIG. 20D** **FIG. 20E** **FIG. 20F**

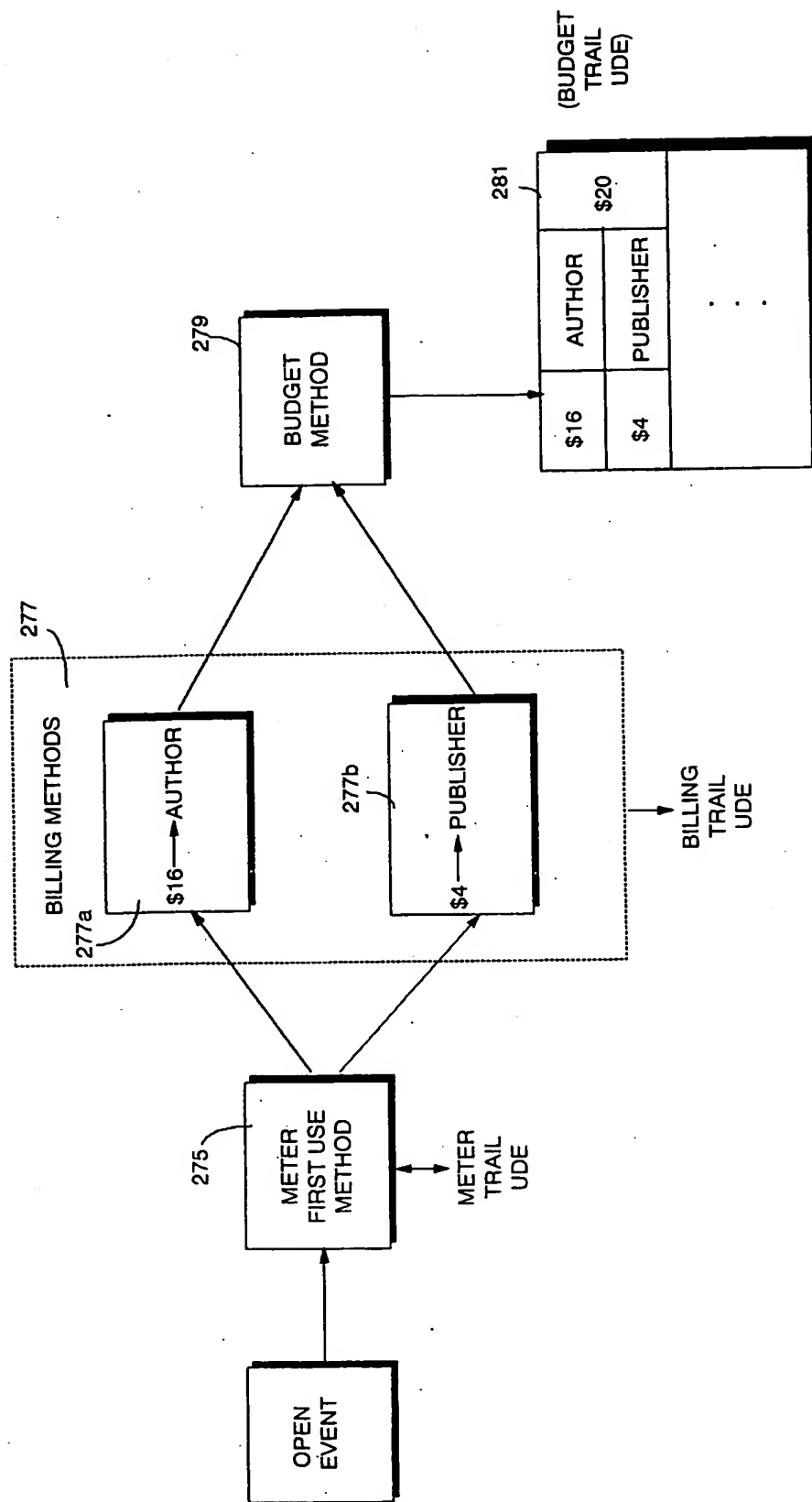
EXAMPLE FINANCIAL CLEARING ACTIVITIES



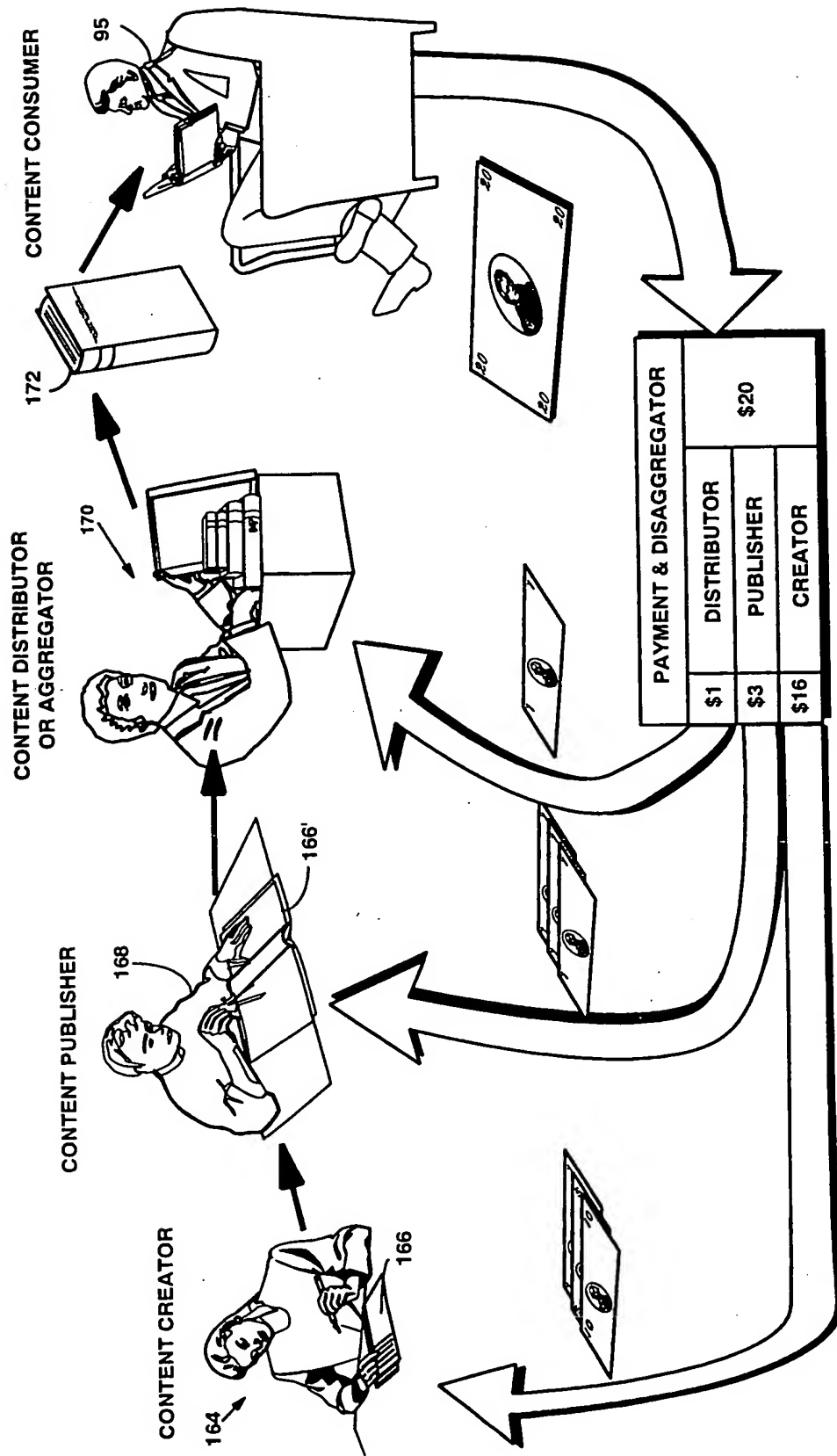
**FIG. 21** Example Payment Disaggregation



**FIG. 22** PAYMENT AND REDISTRIBUTION EXAMPLE

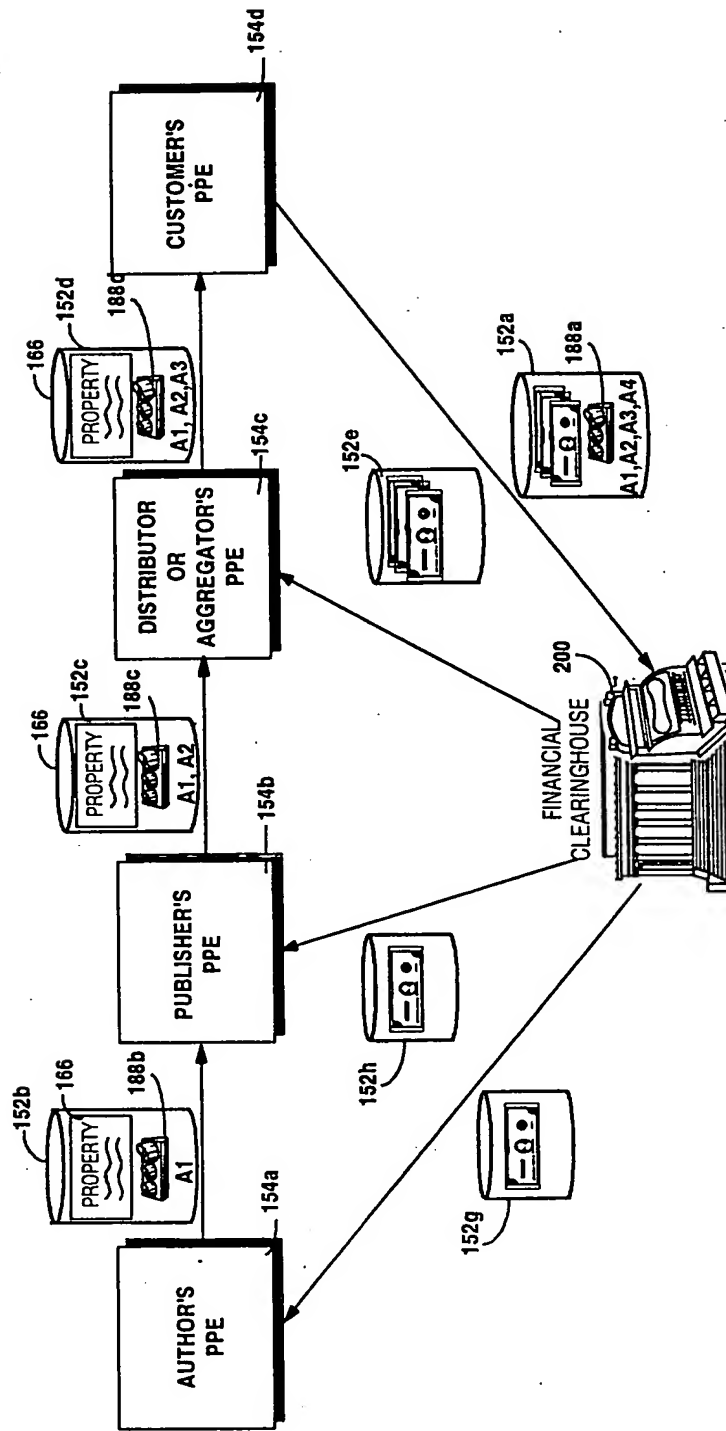


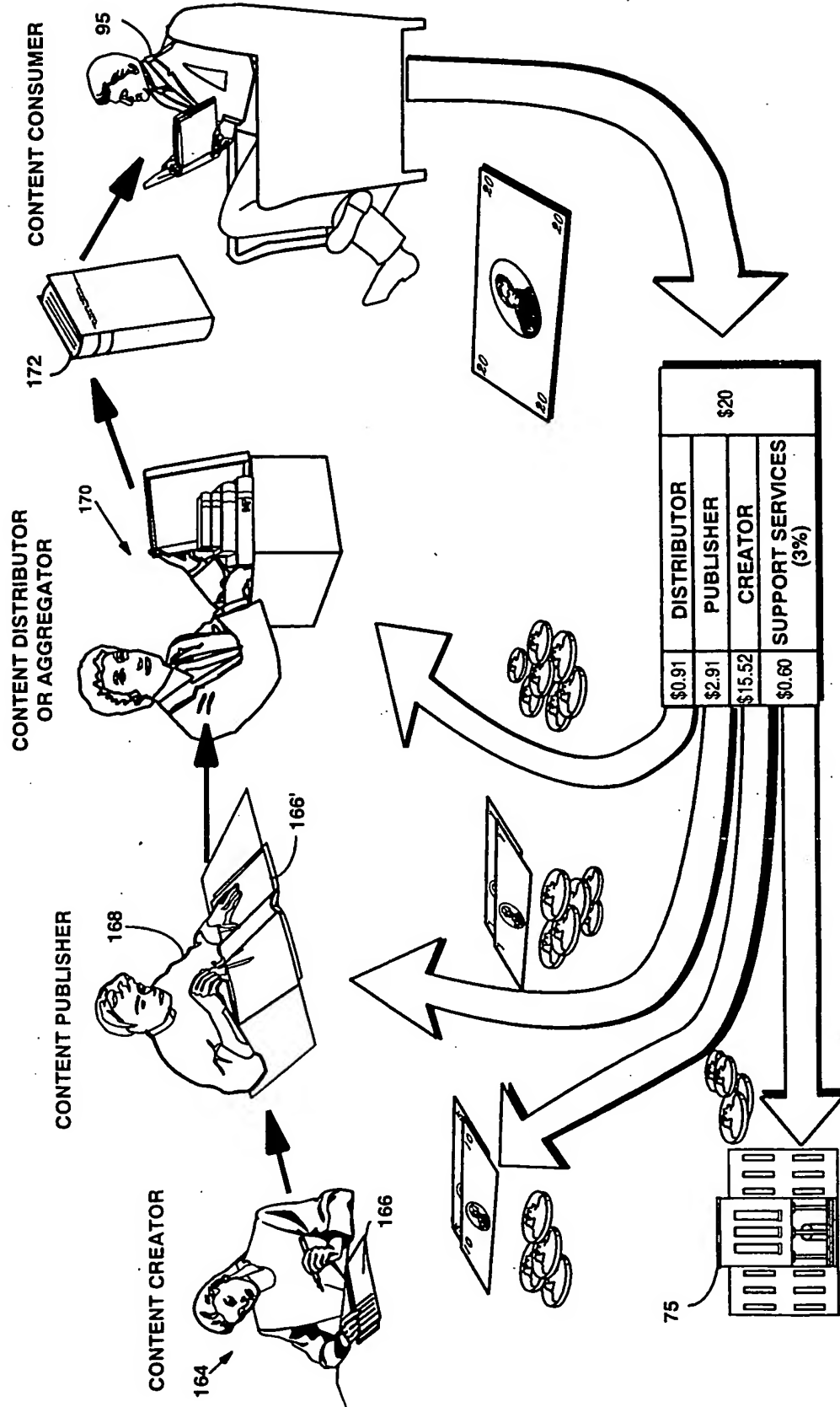
**FIG. 22A** User Node Disaggregation Example



**FIG. 23** Payment Disaggregation

**FIG. 24**  
 EXAMPLE PAYMENT  
 AND REDISTRIBUTION  
 SCENARIO





**FIG. 25** Example Payment Disaggregation

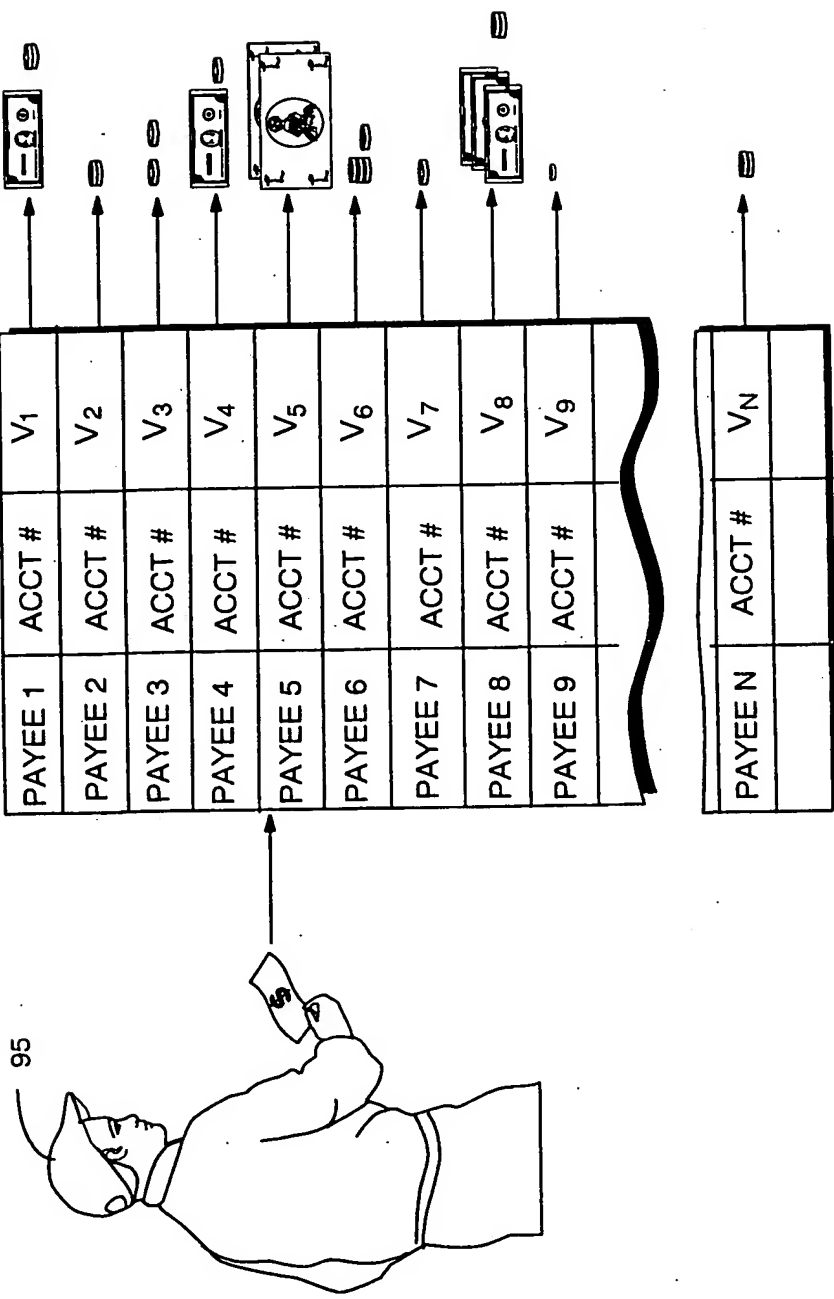
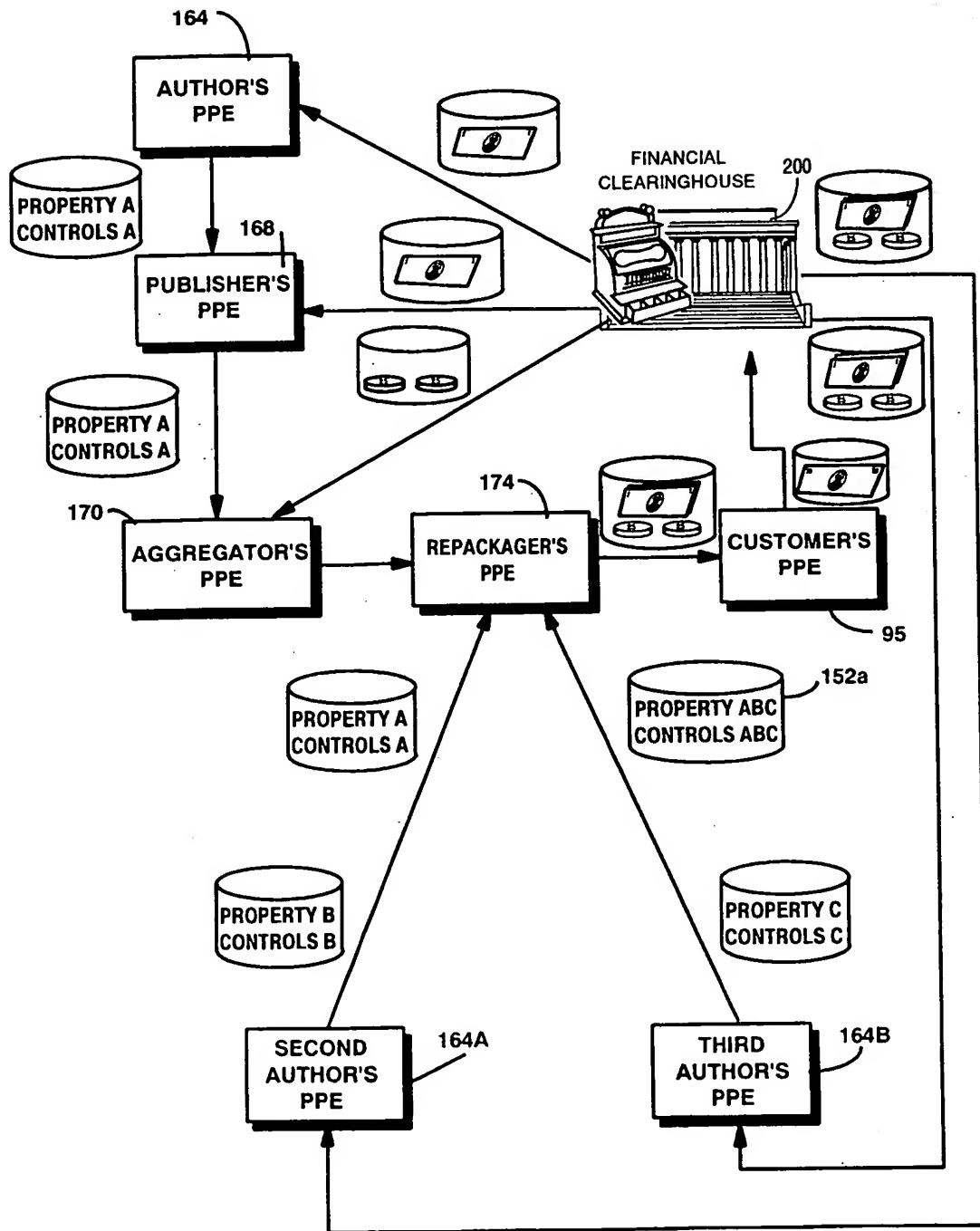


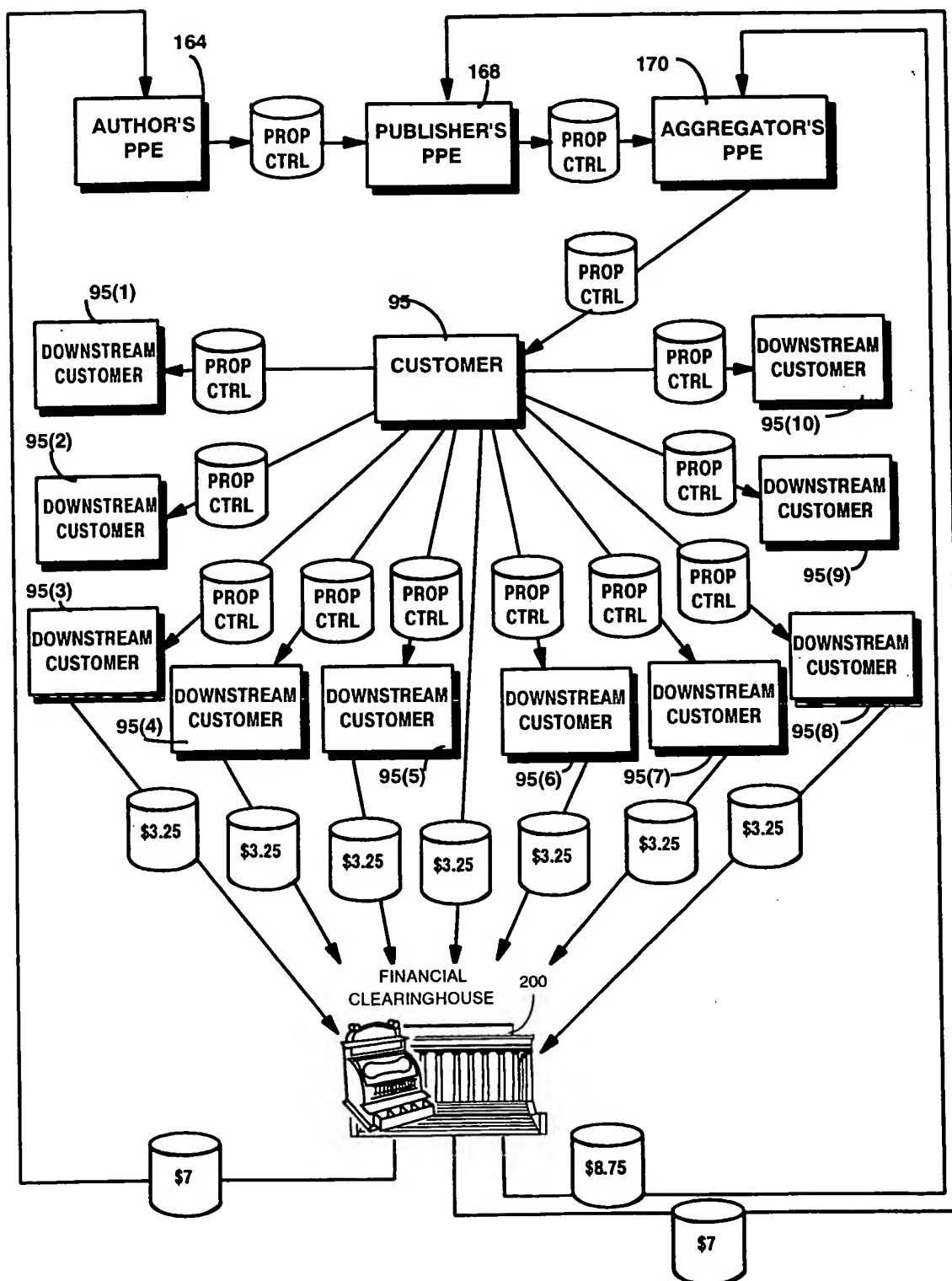
FIG. 26 PAYMENT DISAGGREGATION

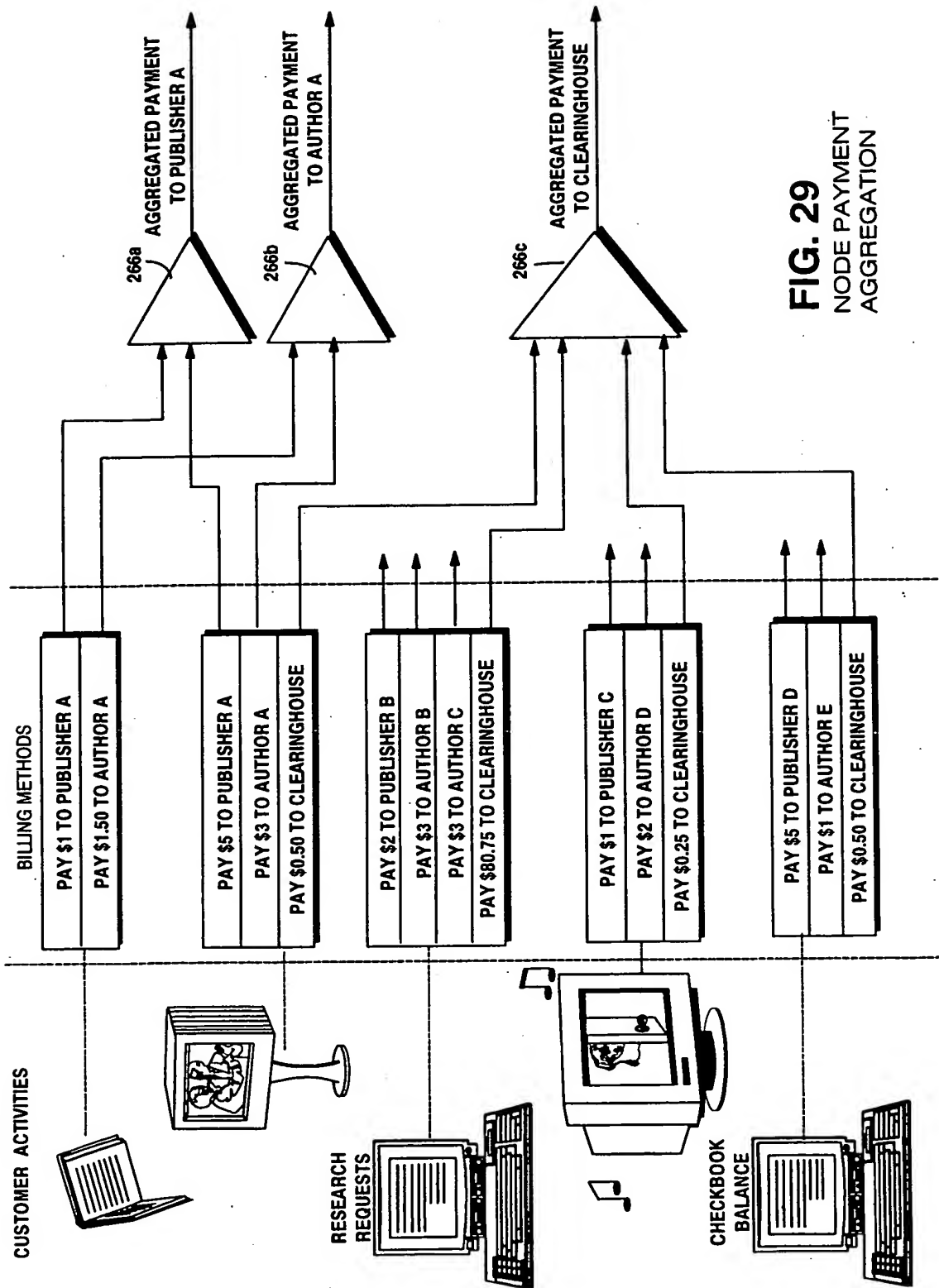


**FIG. 27**  
Example Payment and  
Redistribution Scenario

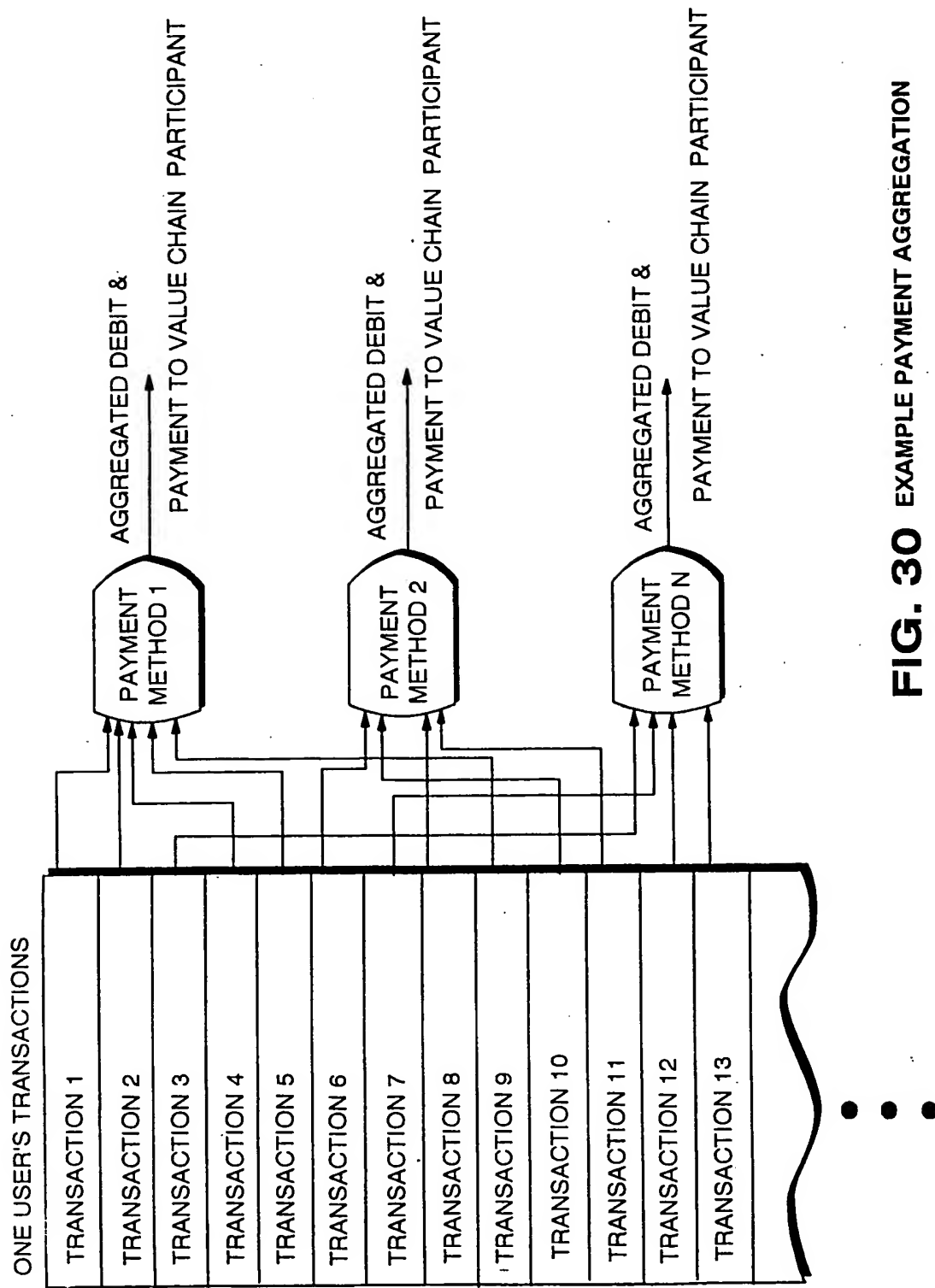


**FIG. 28** Example Super Distribution

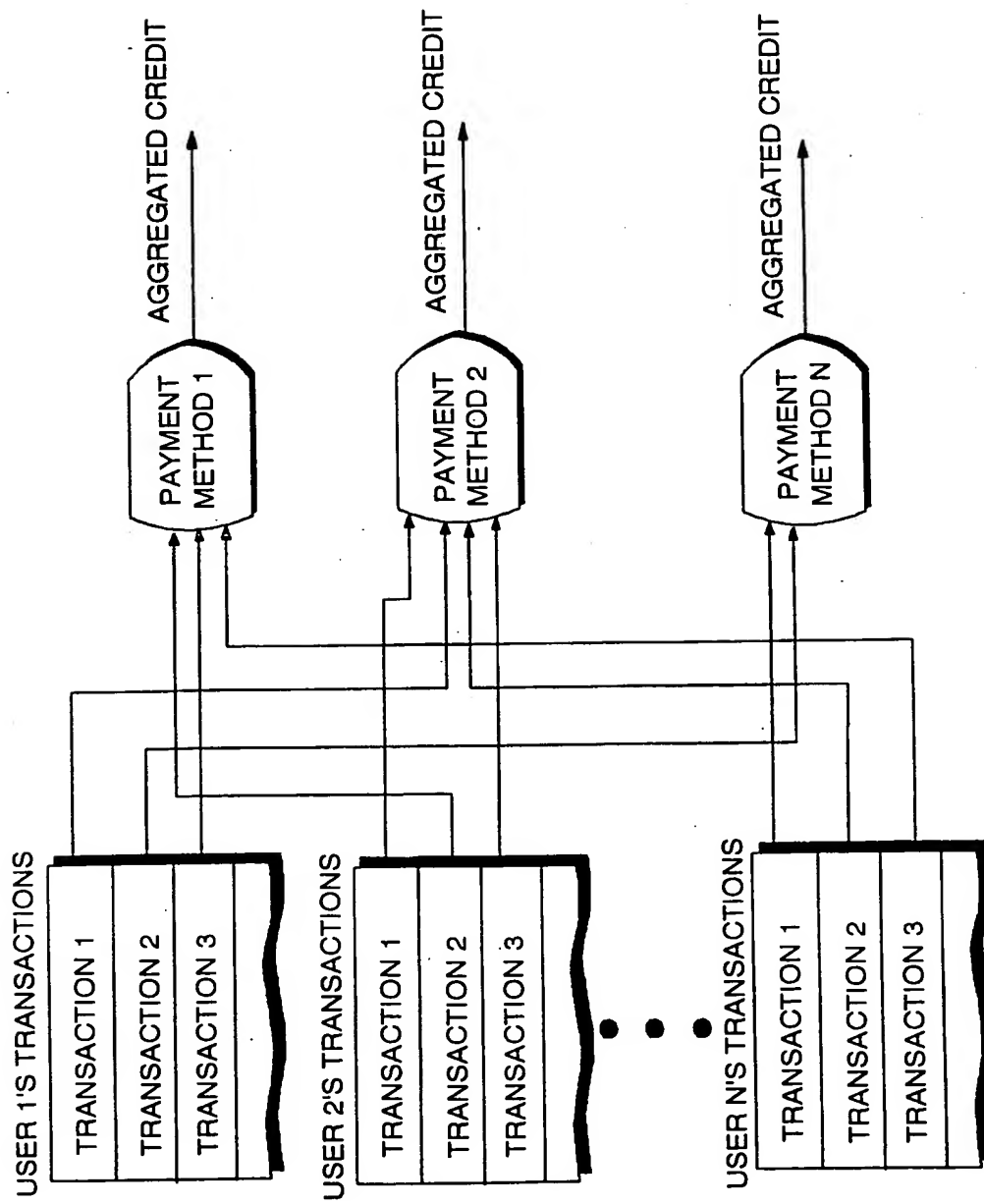




**FIG. 29**  
NODE PAYMENT  
AGGREGATION

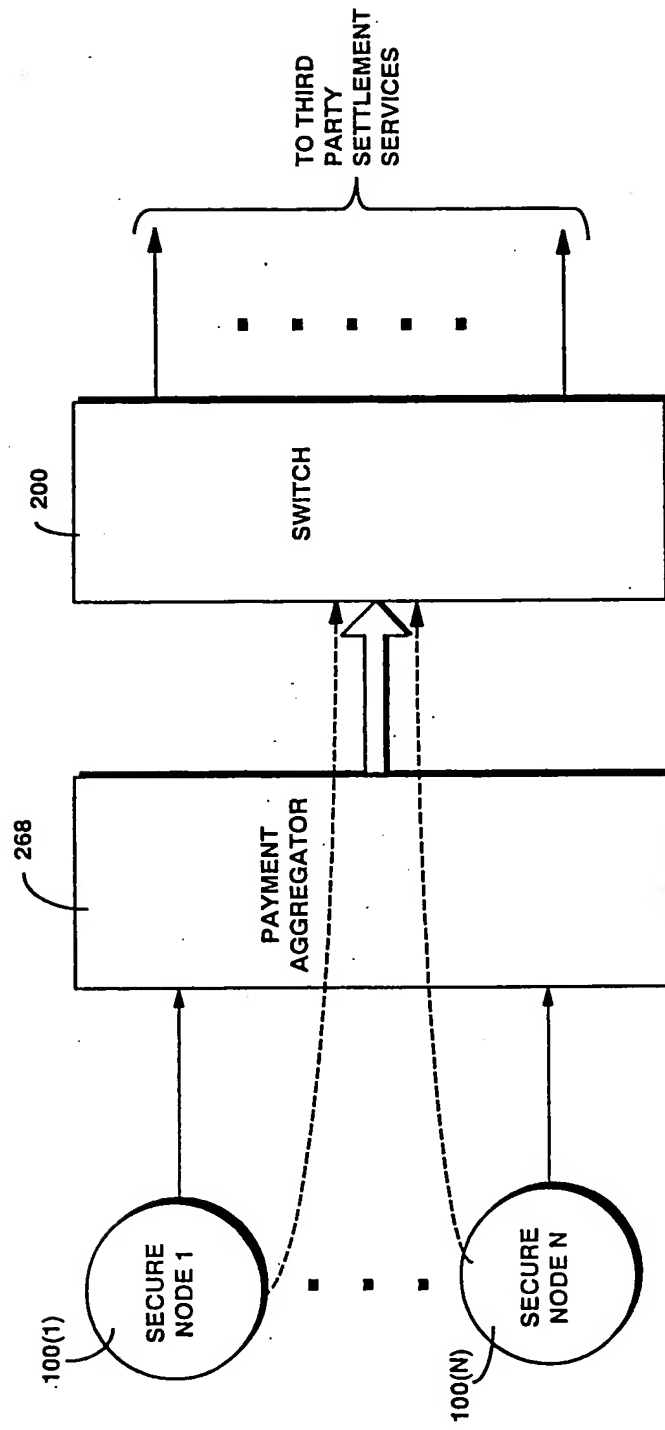


**FIG. 30** EXAMPLE PAYMENT AGGREGATION

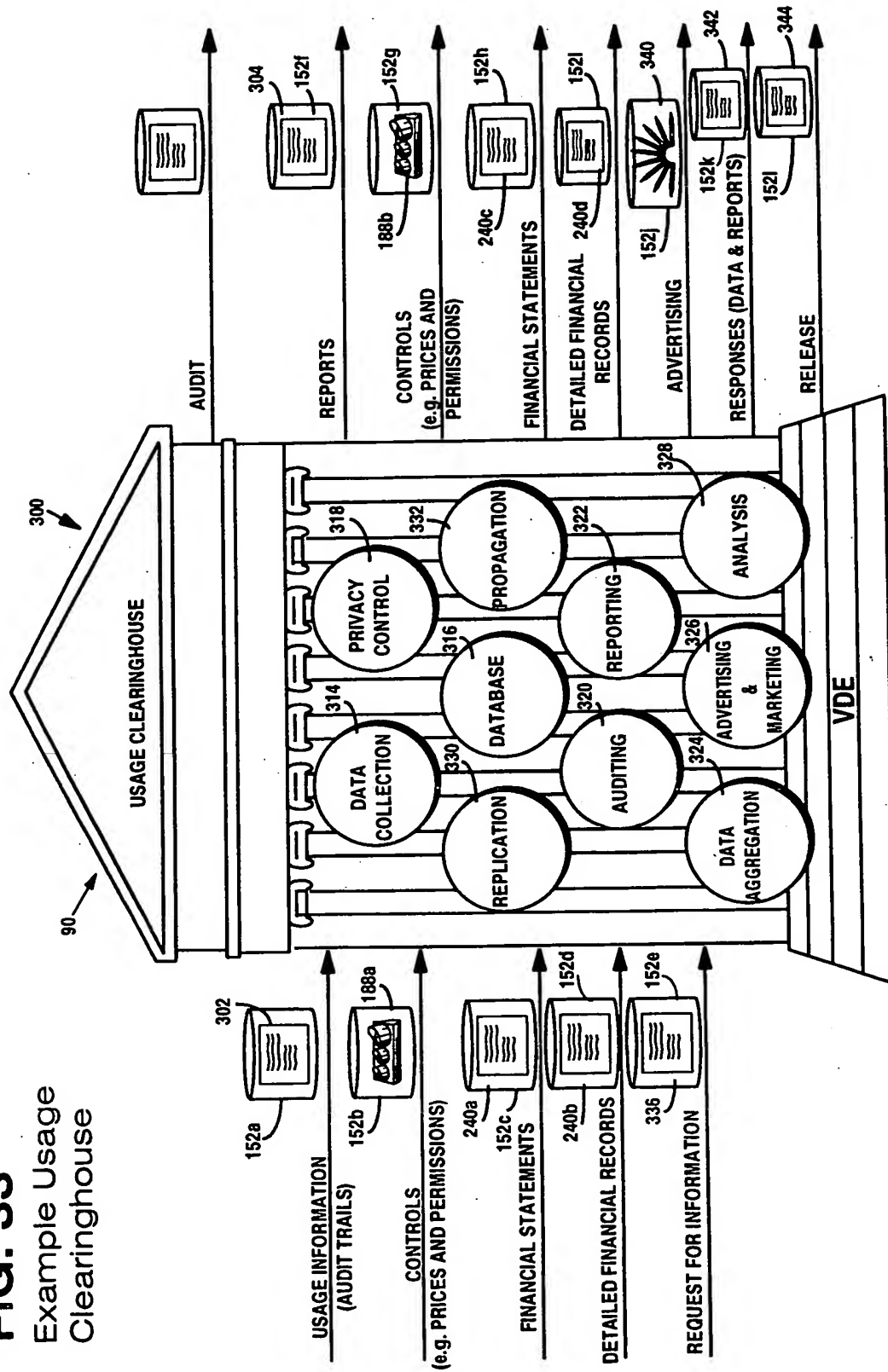


**FIG. 31** Financial Clearinghouse  
Example Payment Aggregation

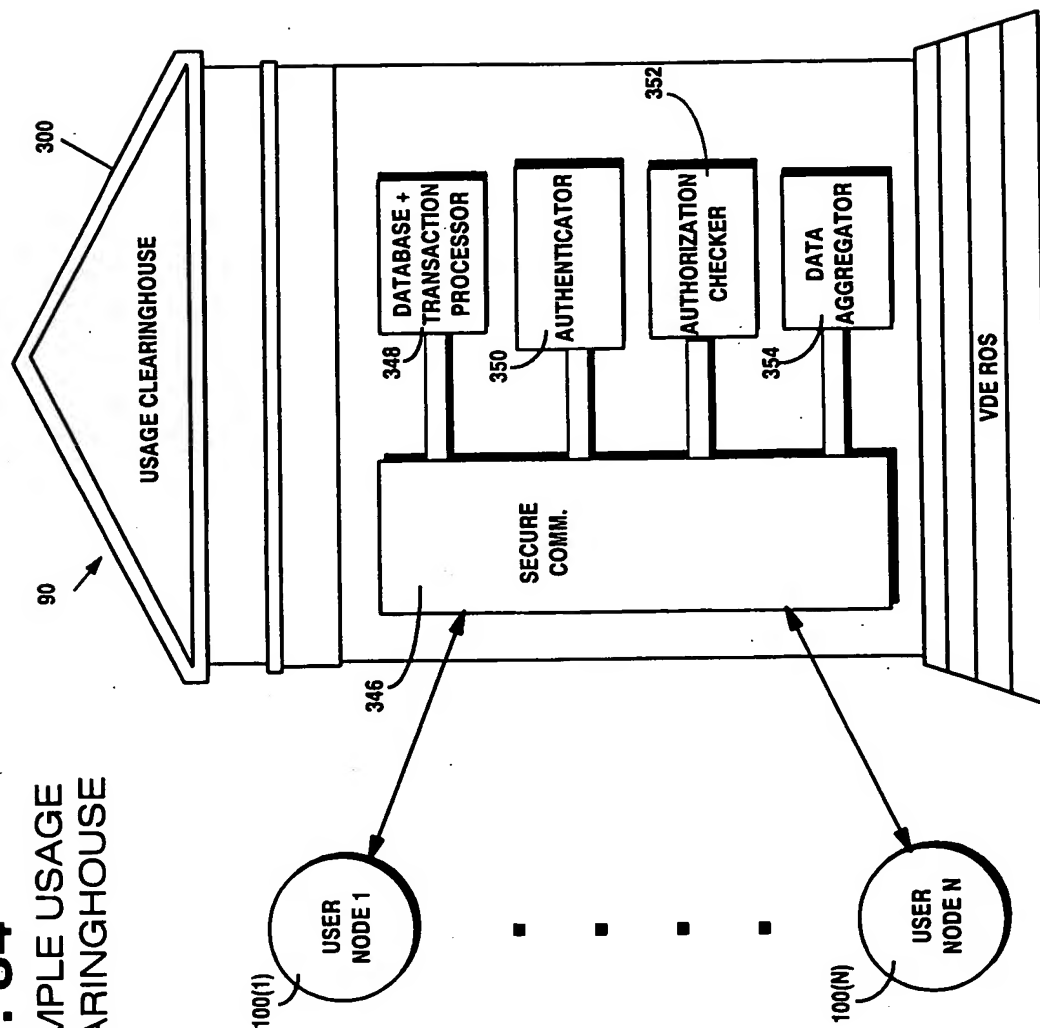
**FIG. 32** EXAMPLE FINANCIAL CLEARINGHOUSE ARRANGEMENT



**FIG. 33**  
Example Usage  
Clearinghouse

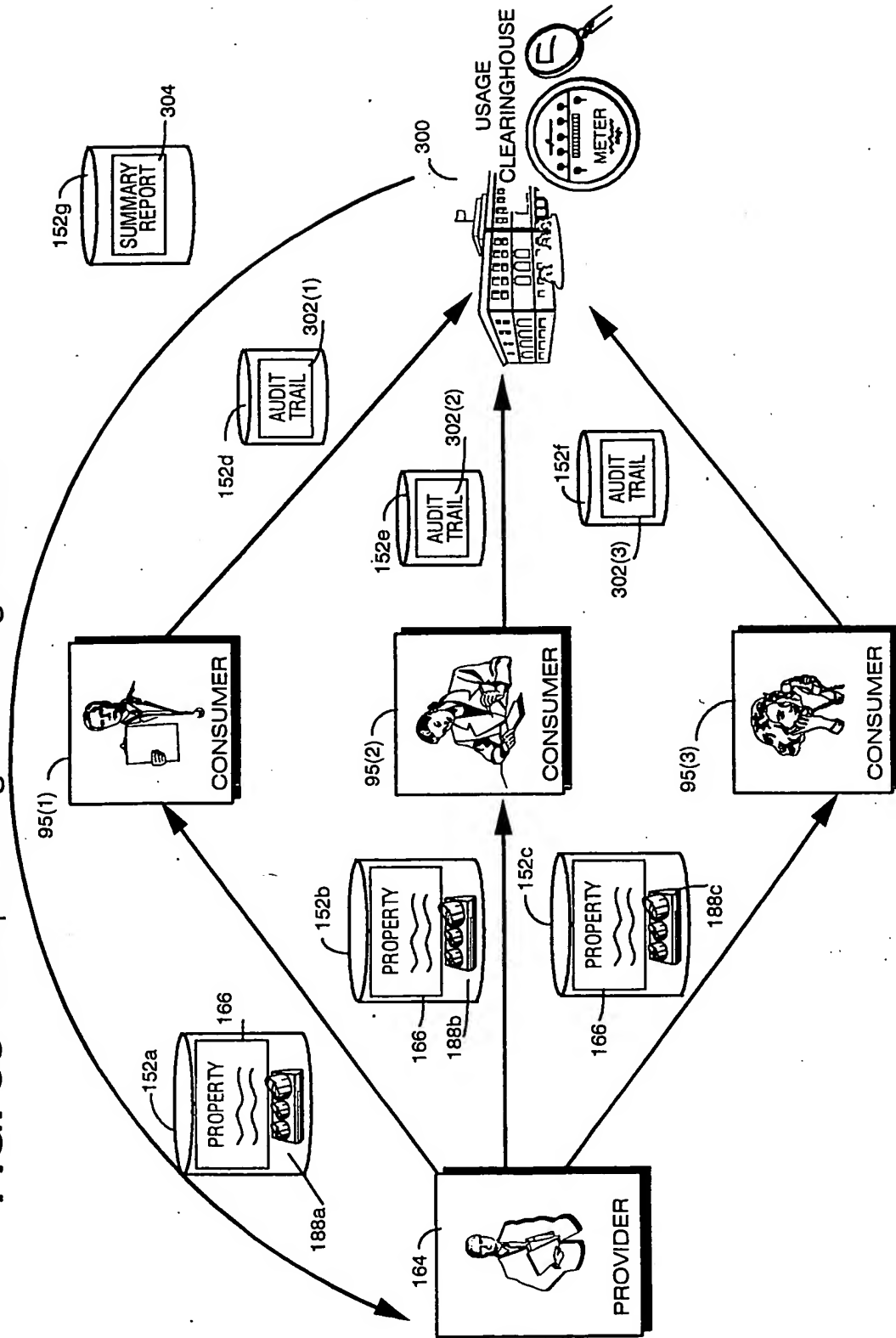


**FIG. 34**  
EXAMPLE USAGE  
CLEARINGHOUSE



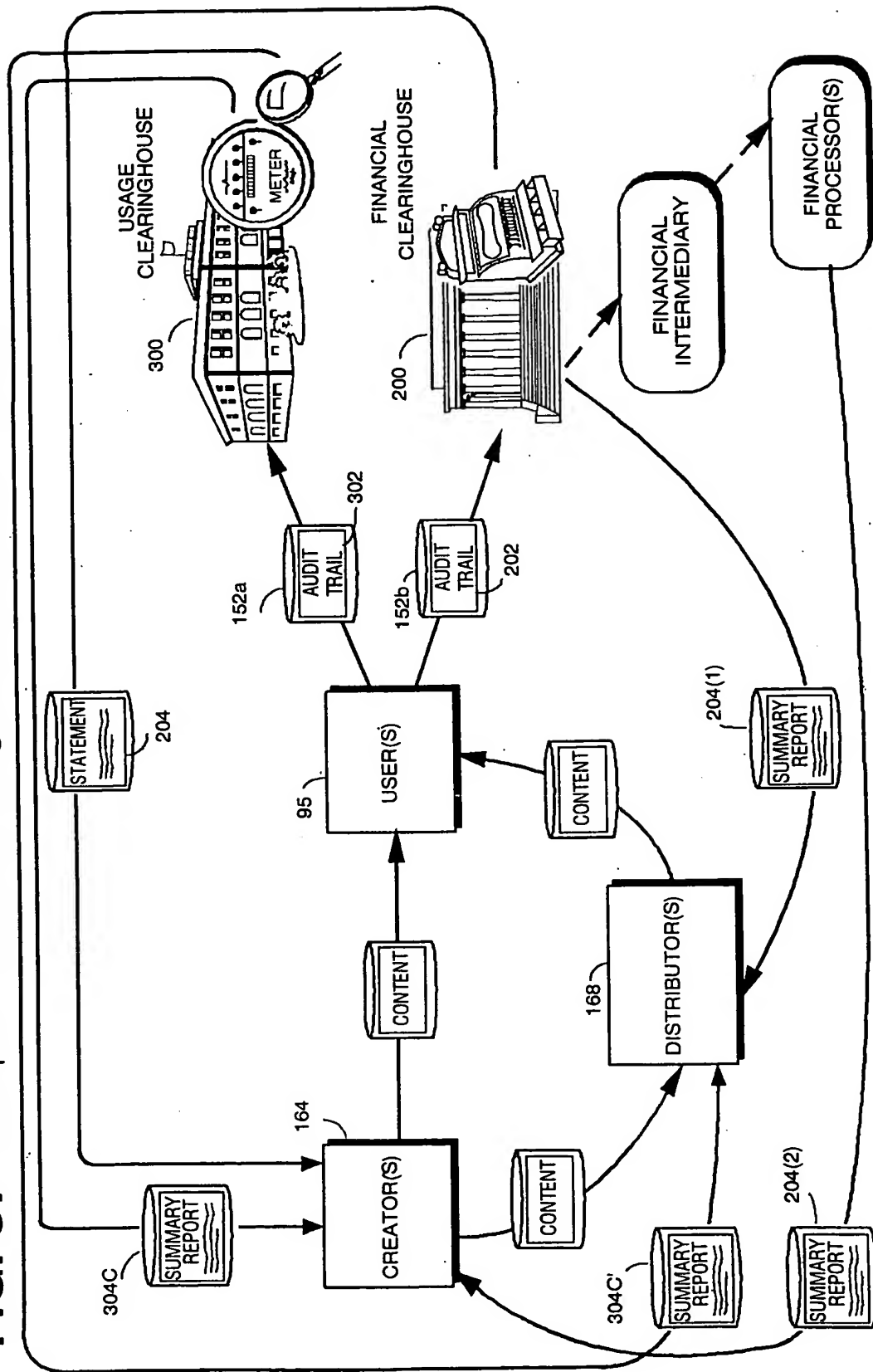


**FIG. 35** Example Usage Clearing Process

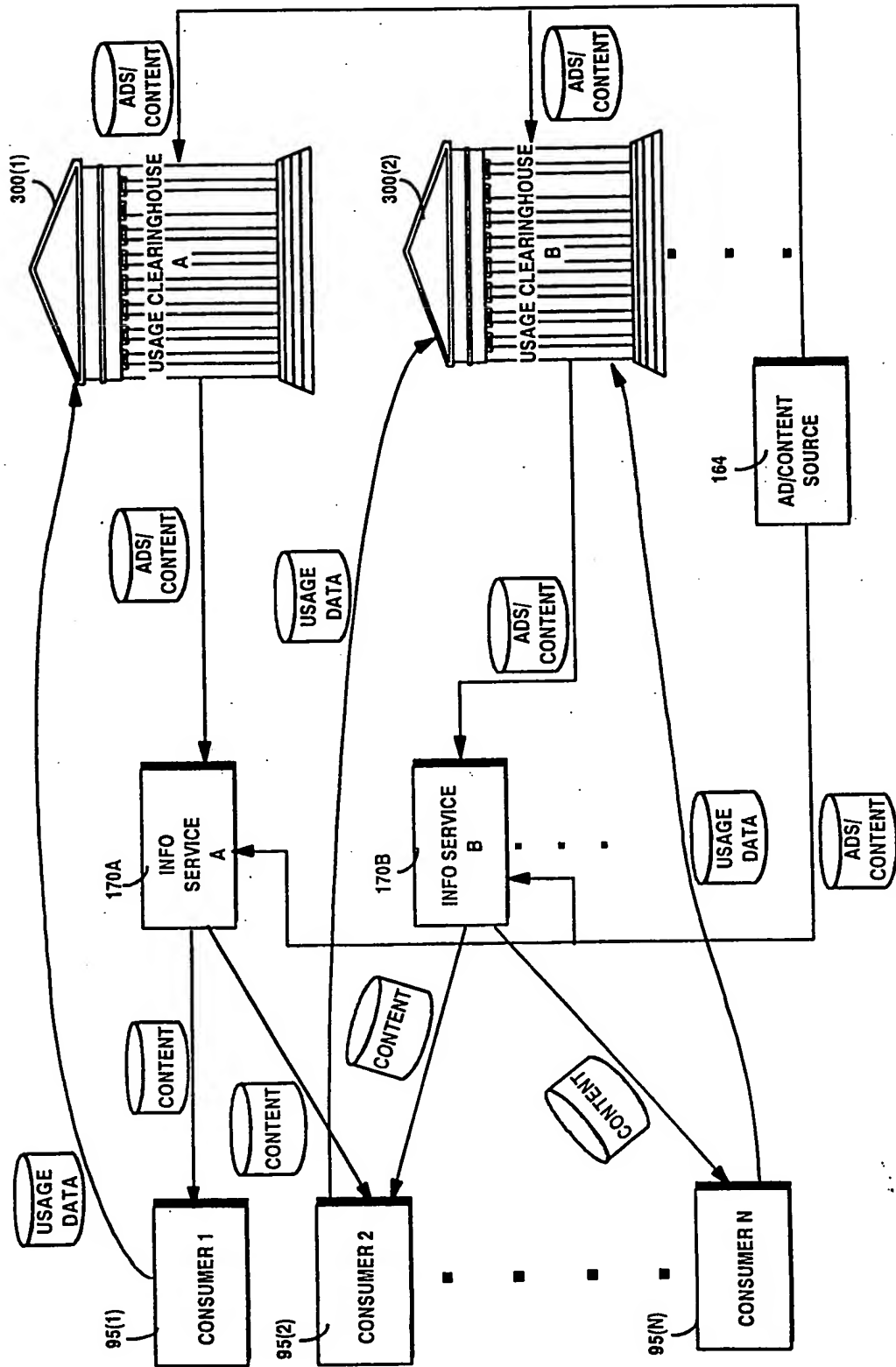




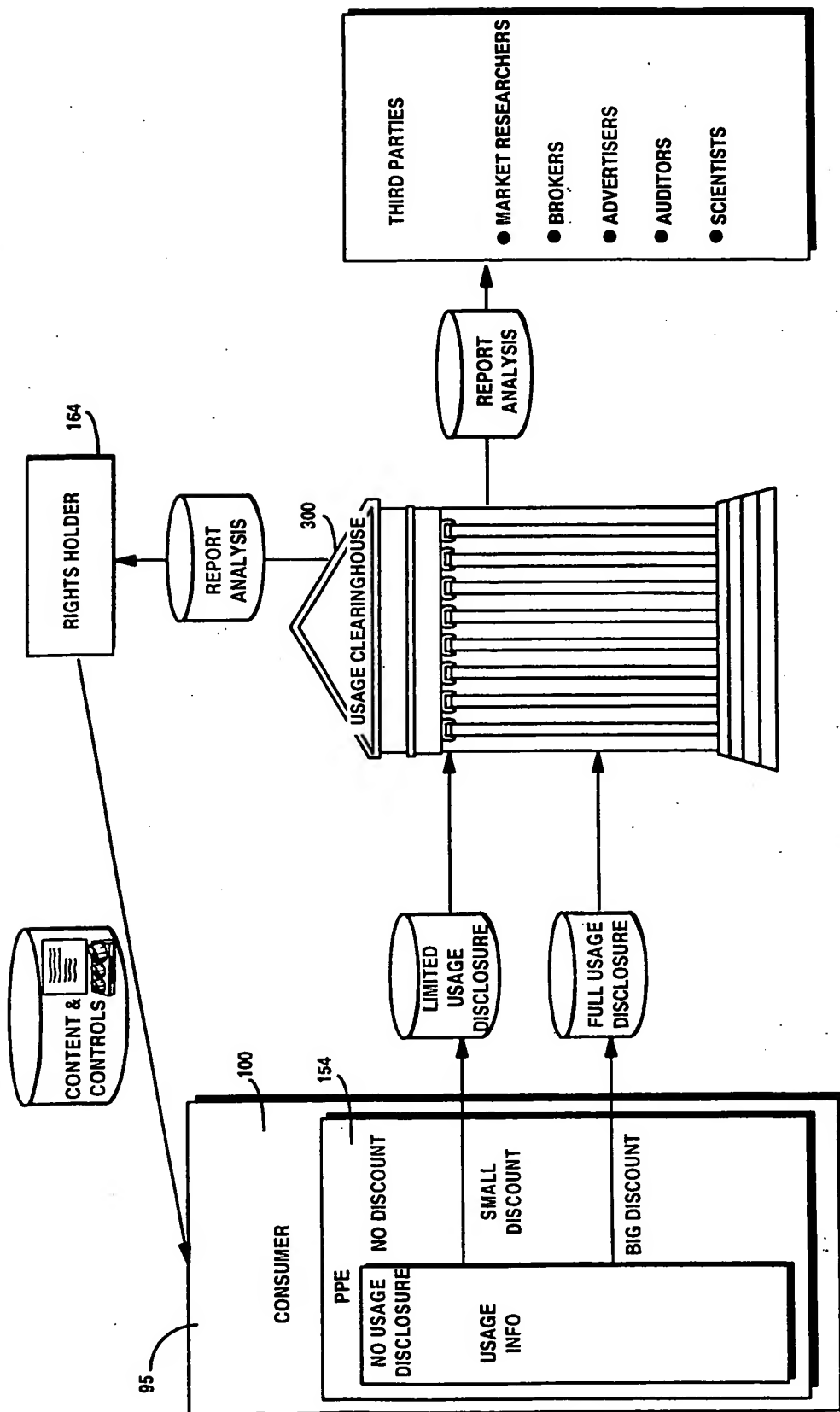
**FIG. 37** Example Financial & Usage Clearinghouse Process



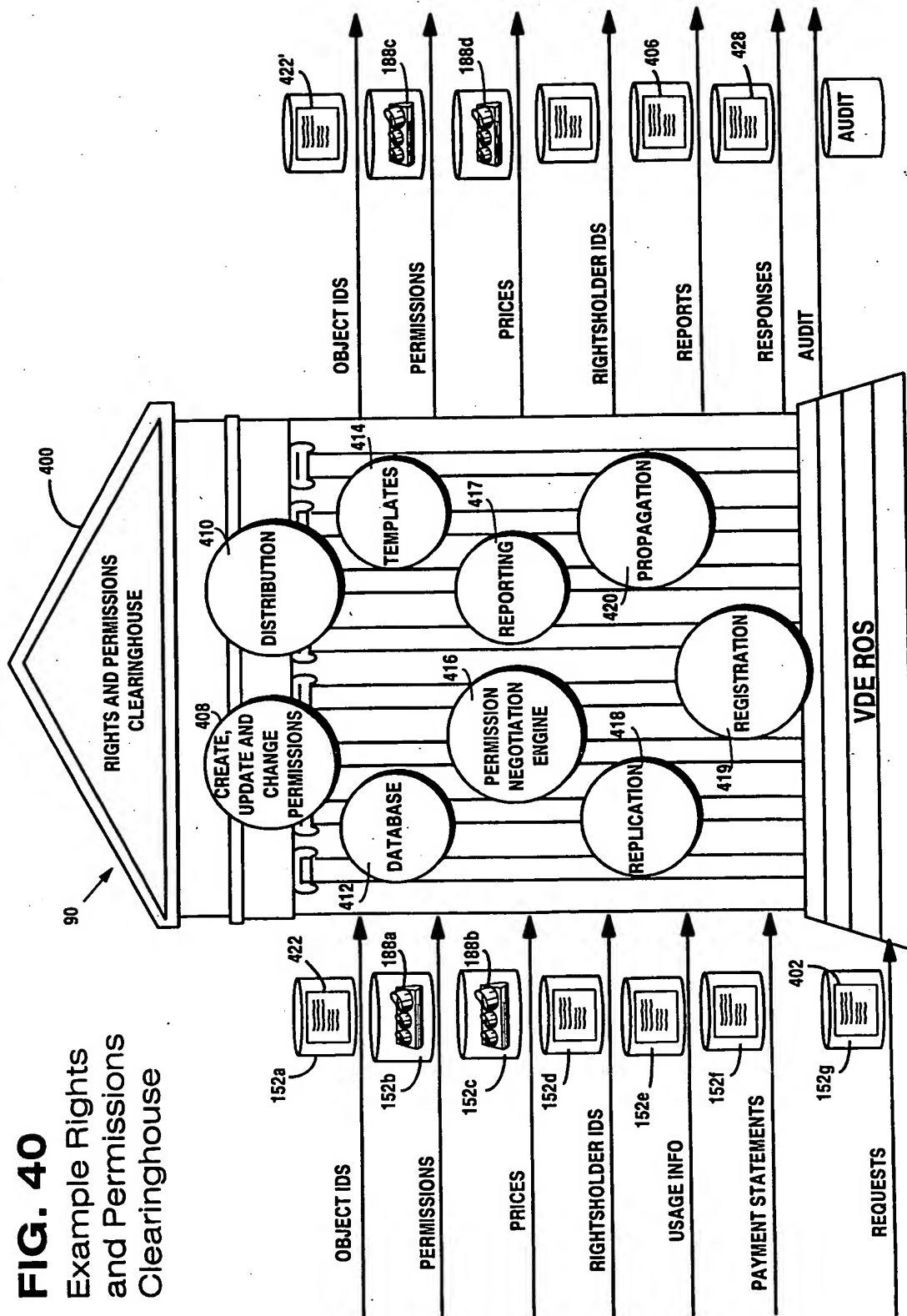
**FIG. 38** EXAMPLE USAGE CLEARINGHOUSE MEDIA PLACEMENT



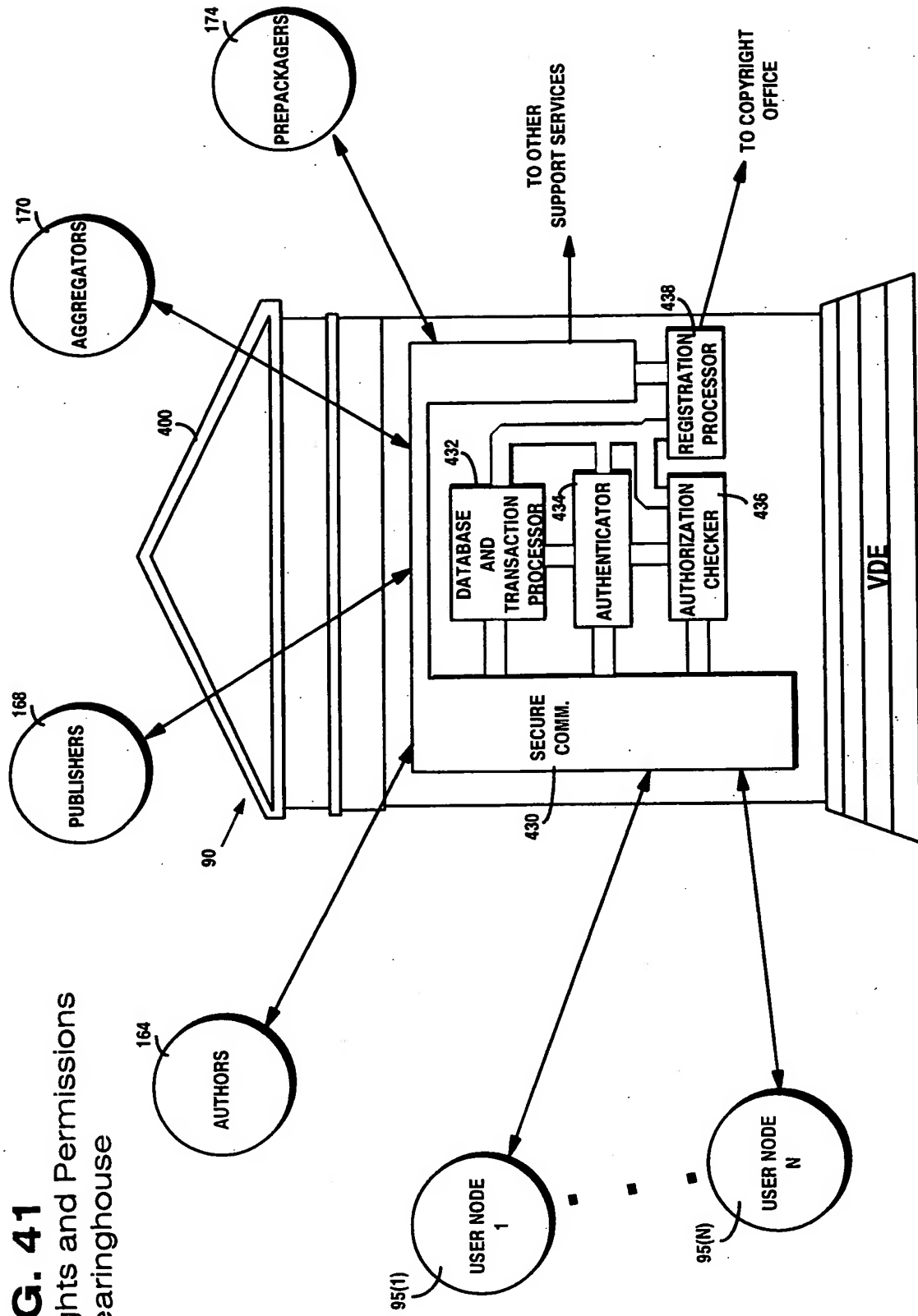
**FIG. 39**  
 EXAMPLE USAGE CLEARINGHOUSE  
 DISCOUNTS BASED ON DISCLOSURE



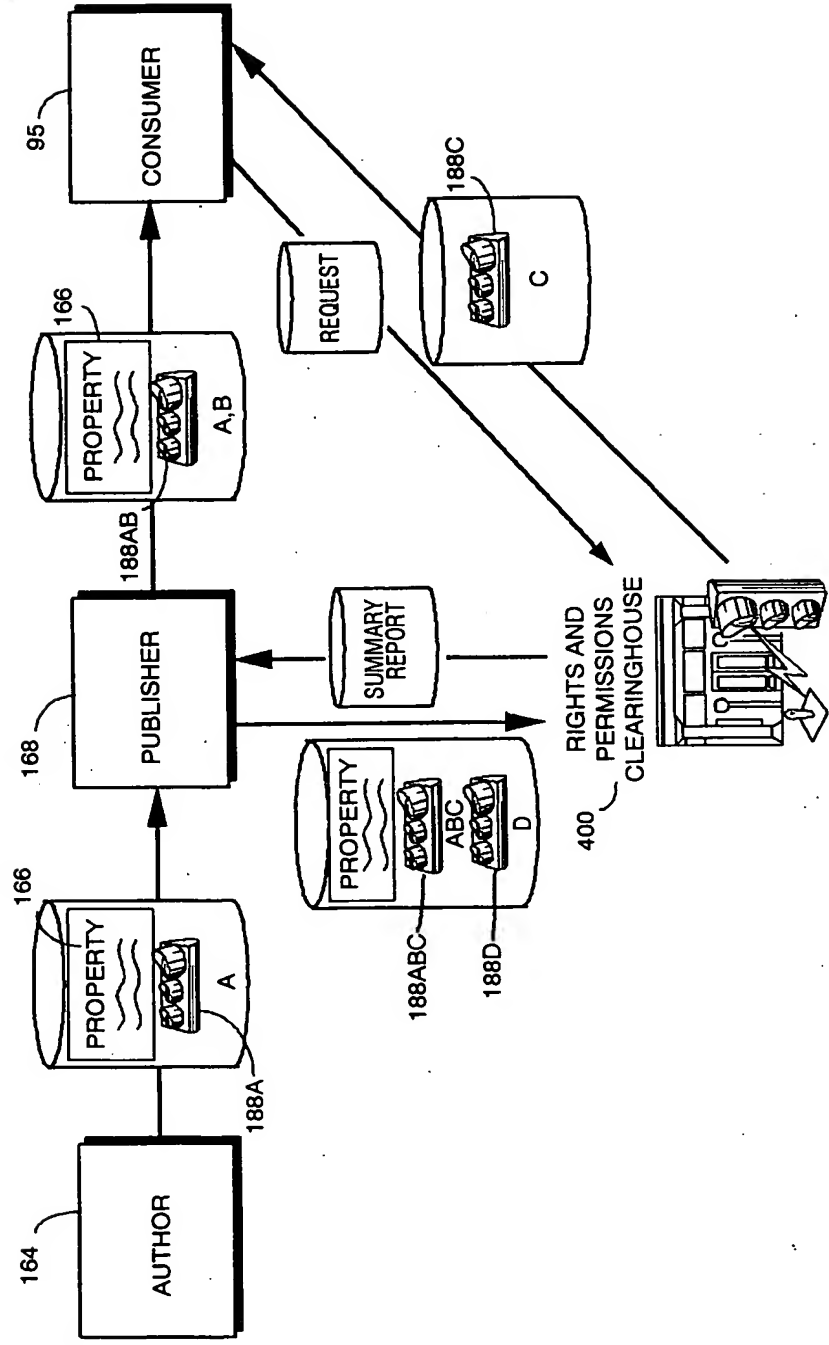
**FIG. 40**  
Example Rights and Permissions  
Clearinghouse



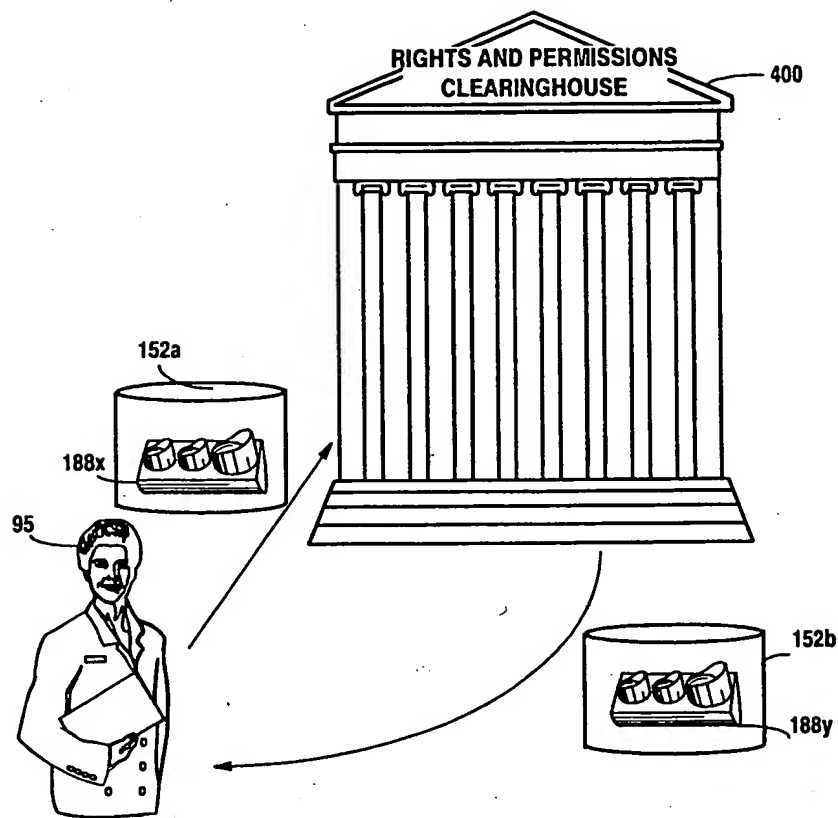
**FIG. 41**  
Rights and Permissions  
Clearinghouse



**FIG. 42** Example Rights & Permissions Clearinghouse Process



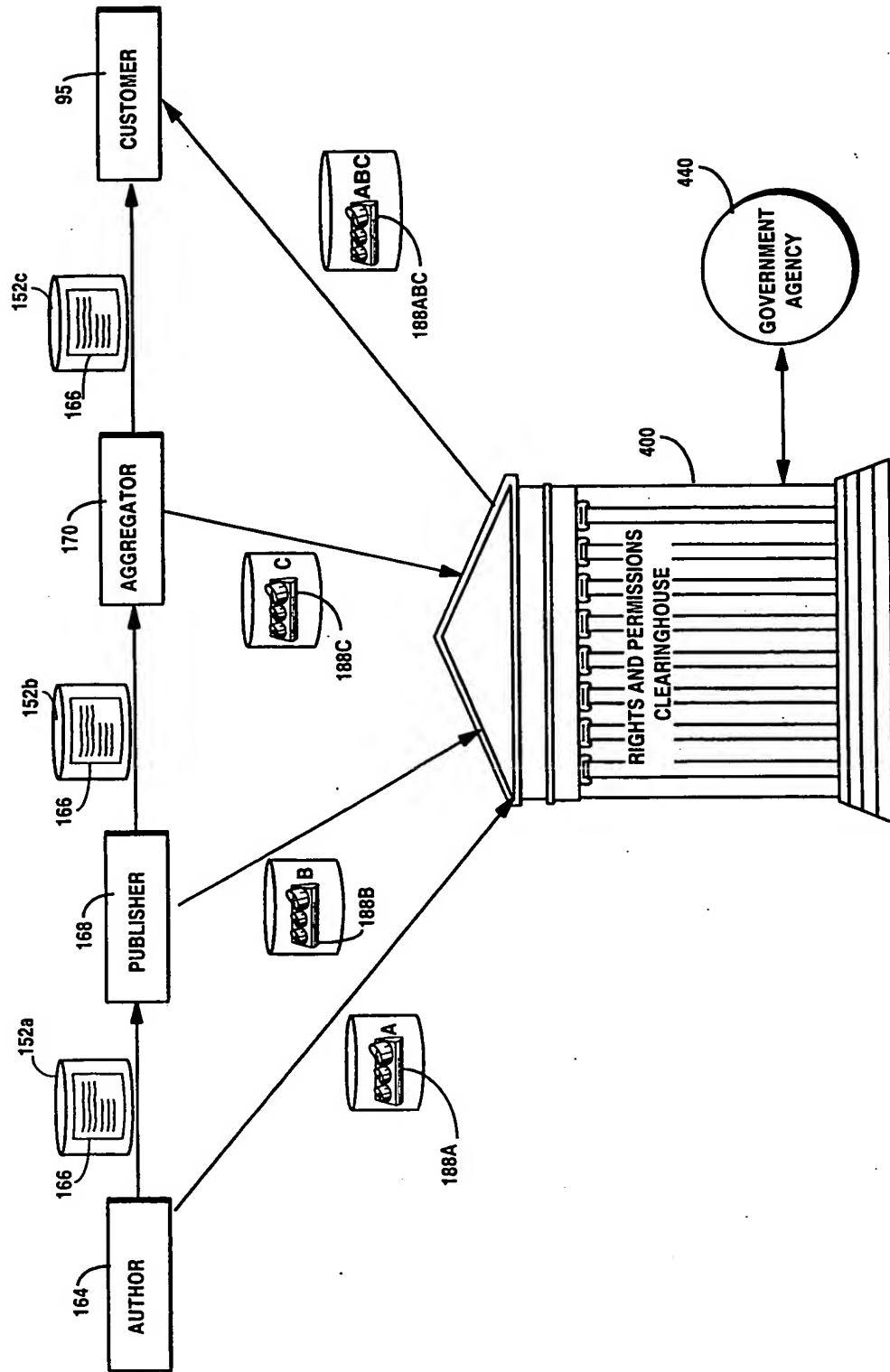


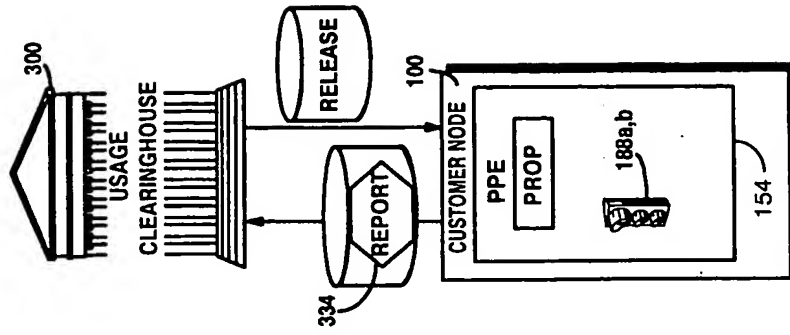


**FIG. 42A**

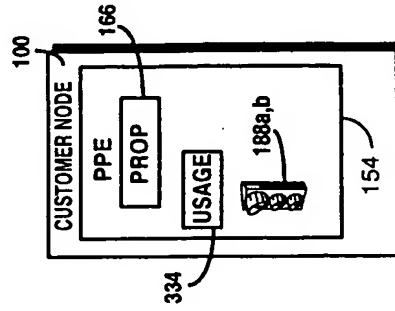
Consumer Registers Control Set  
To Request Updates

**FIG. 43** EXAMPLE RIGHTS AND PERMISSIONS VALUE CHAIN

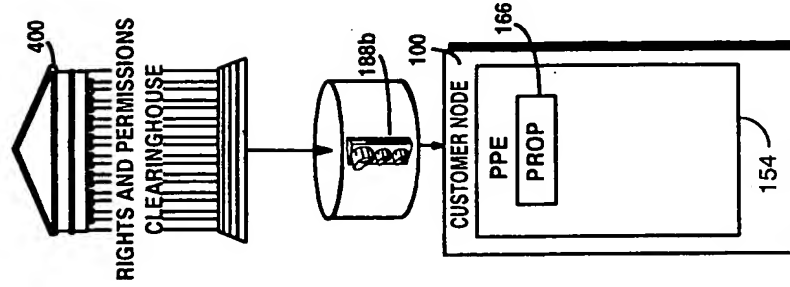




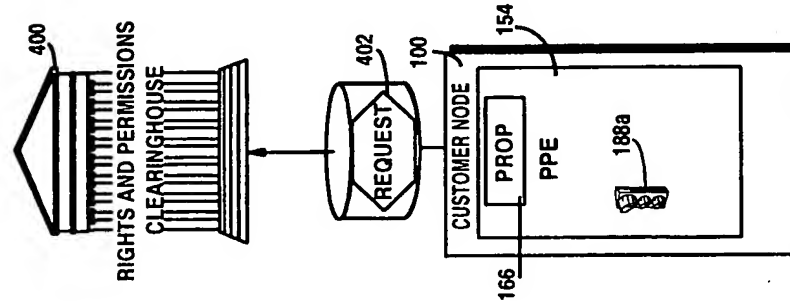
**FIG. 44E**  
Customer  
Node Reports  
Aspects Of  
Usage



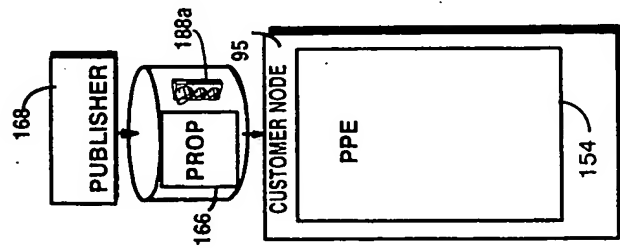
**FIG. 44D**  
Customer  
Uses Property  
In Accordance  
With Rights



**FIG. 44C**  
Rights and  
Permissions  
Clearinghouse  
Provides Rights  
To Customer



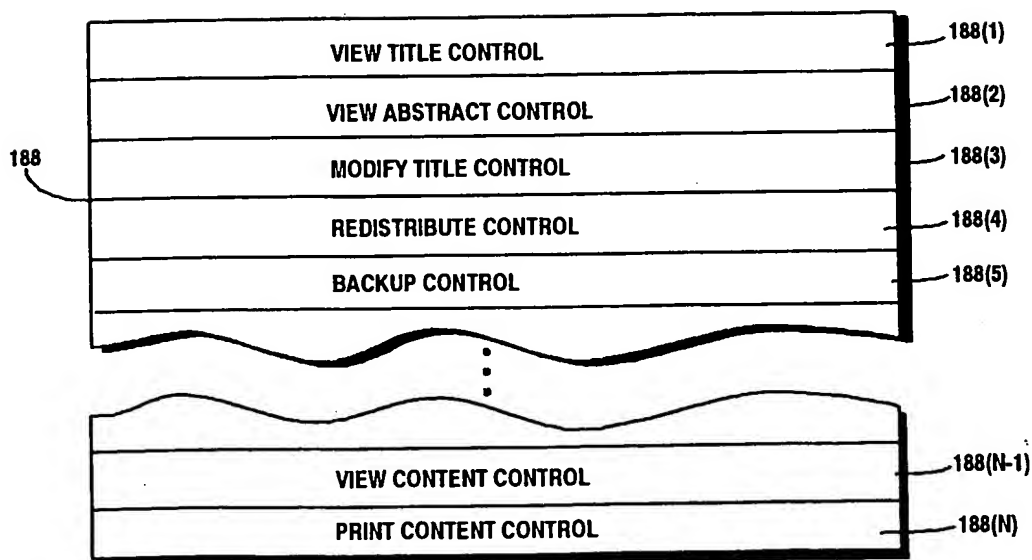
**FIG. 44B**  
Customer  
Requests Rights  
To Use Property



**FIG. 44A**  
Customer  
Receives  
Property

ACTION	PERMISSION TYPE				PRICING MODELS			
	UNCOND. PERMIT	COND. ON CONTENT PAYMENT	BASED	UNCOND. PROHIBIT				
VIEW TITLE	✓							
VIEW ABSTRACT	✓							
MODIFY TITLE				✓	. . . .			
REDIS-TRIBUTE			✓					
BACK UP		✓			ONE TIME PURCH.	PAY PER ACTION	DECL. COST	...
VIEW CONTENT		✓			ONE TIME PURCH.	PAY PER VIEW	DECL. COST	...
PRINT CONTENT		✓			ONE TIME PURCH.	PAY PER PRINT	DECL. COST	...

**FIG. 45A** EXAMPLE RIGHTS TEMPLATE

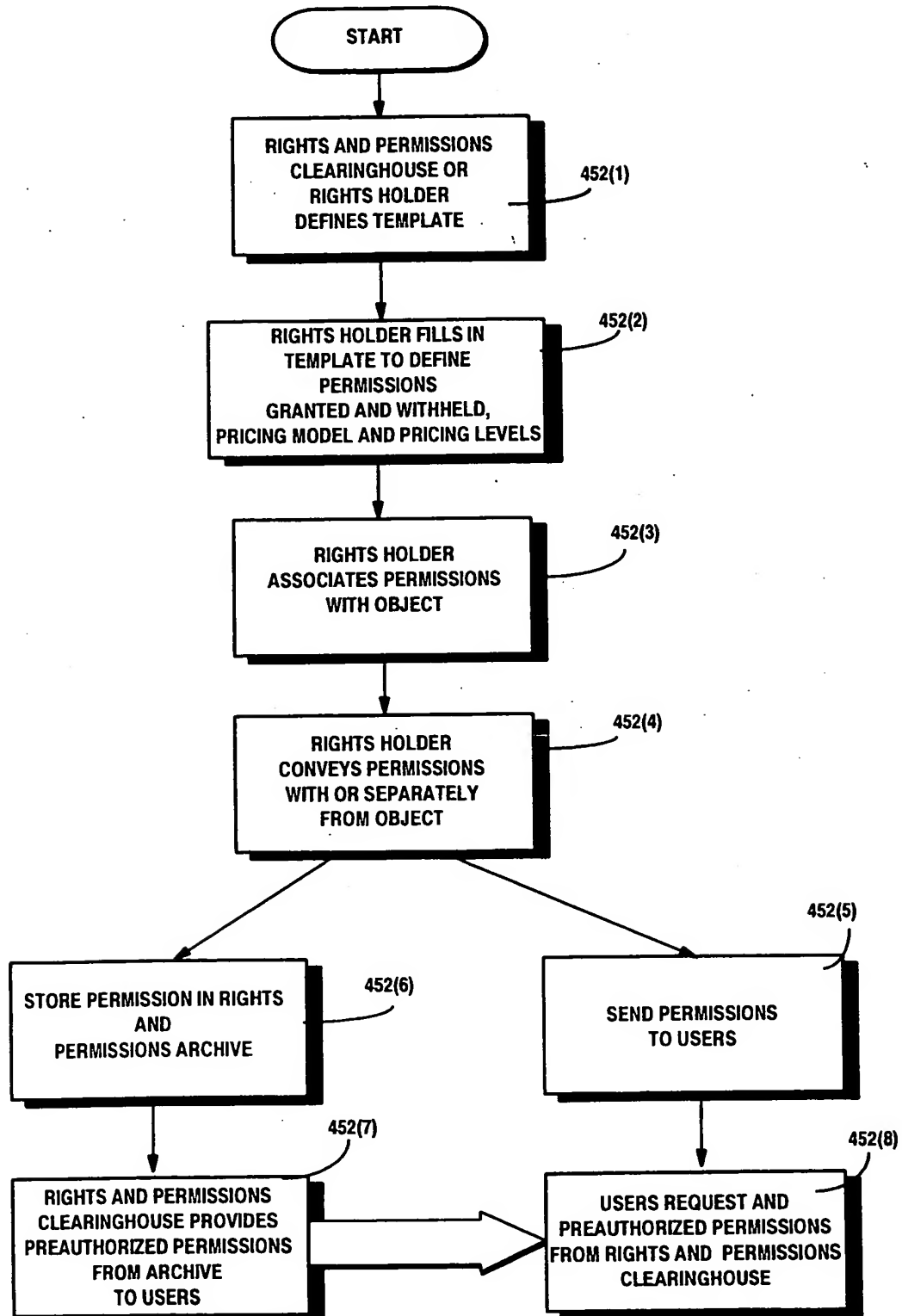


**FIG. 45C** EXAMPLE CONTROL SET

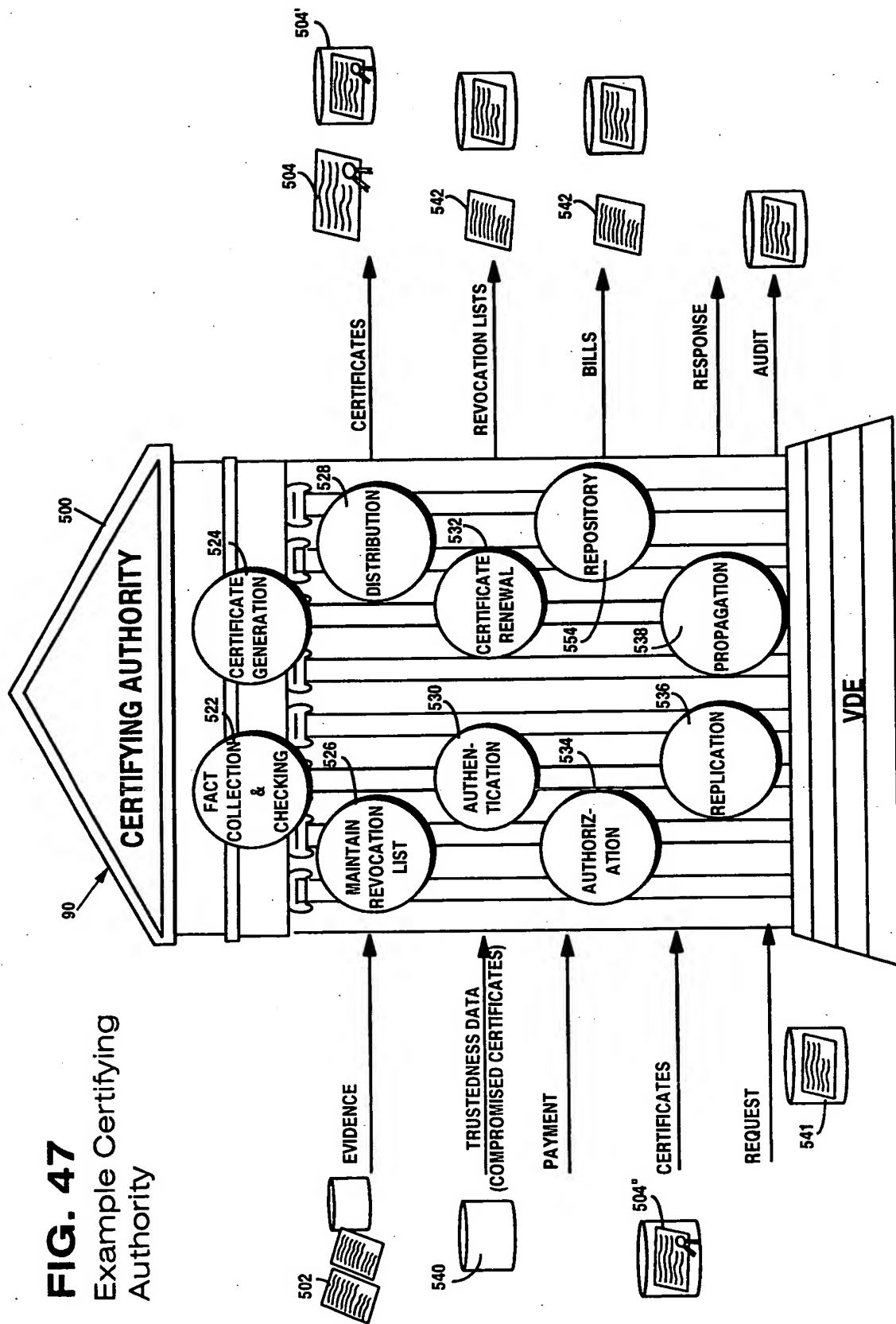
VIEW CONTENT	ONE TIME PURCHASE	✓	\$ _____
	PAY PER VIEW	✓	\$ _____
	DECLINING COST		\$ _____
PRINT CONTENT	ONE TIME PURCHASE		\$ _____

**FIG. 45B** PRICING MODELS AND LEVELS

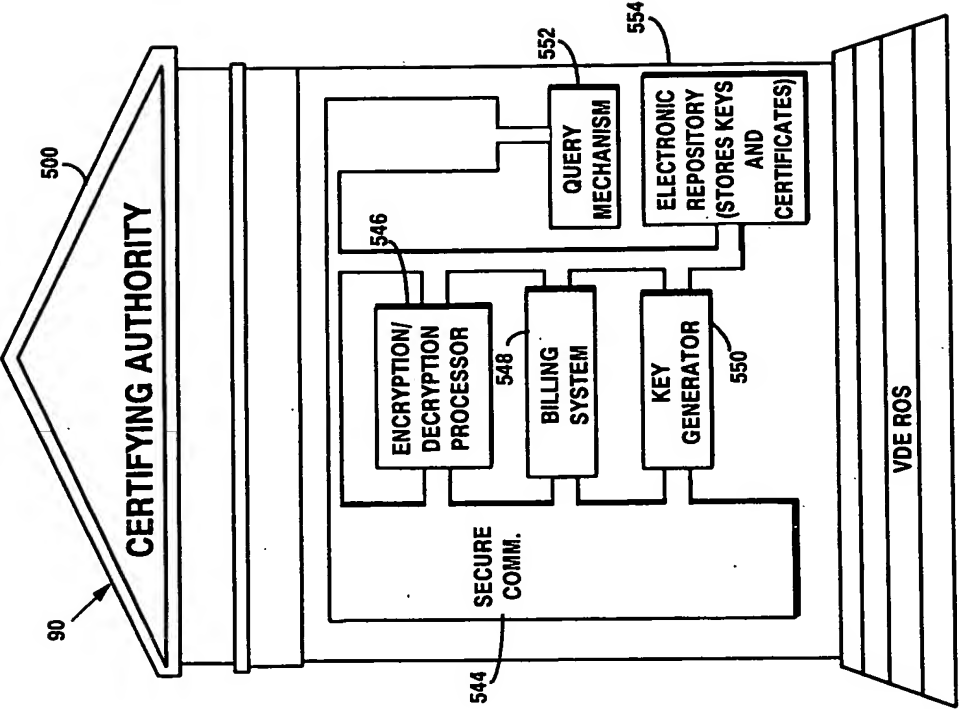
**FIG. 46** Example Rights And Permissions Clearing Process



**FIG. 47**  
Example Certifying  
Authority

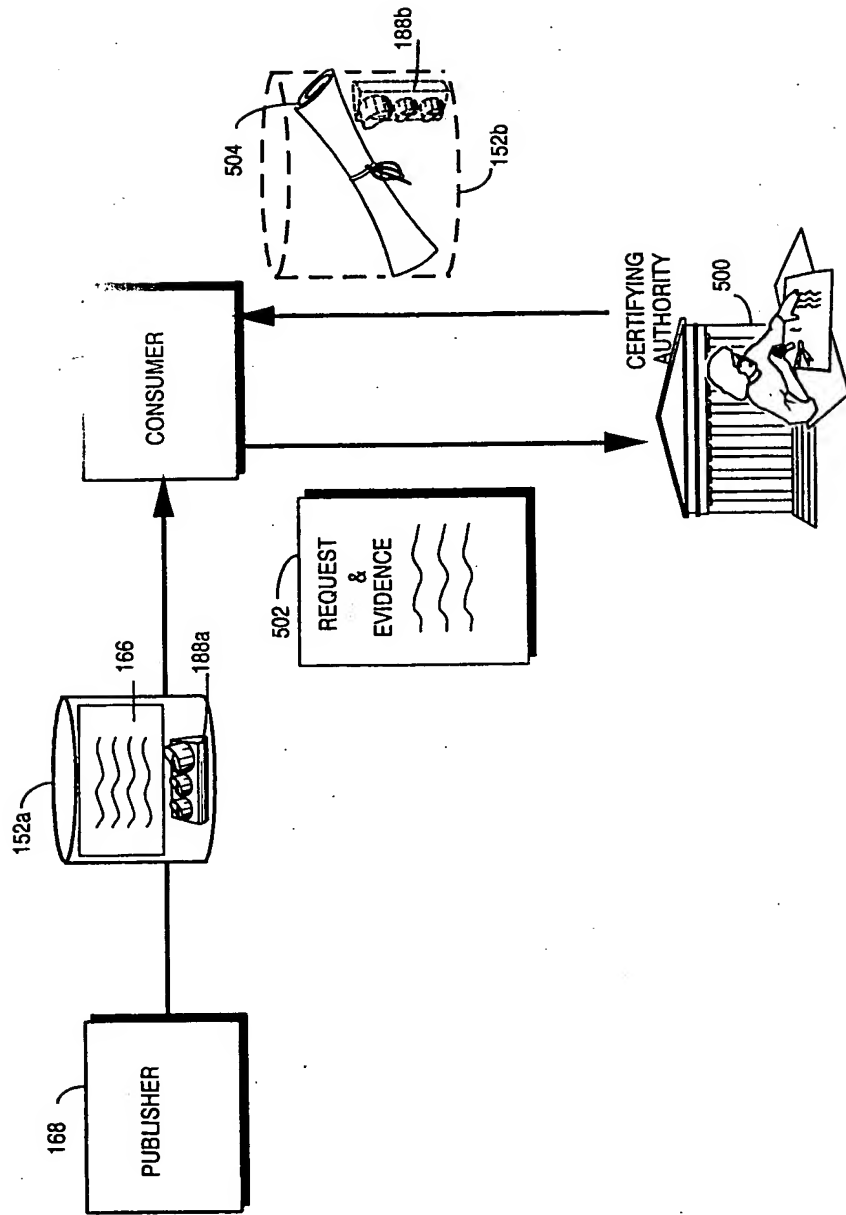


**FIG. 48**  
Example Certifying  
Authority



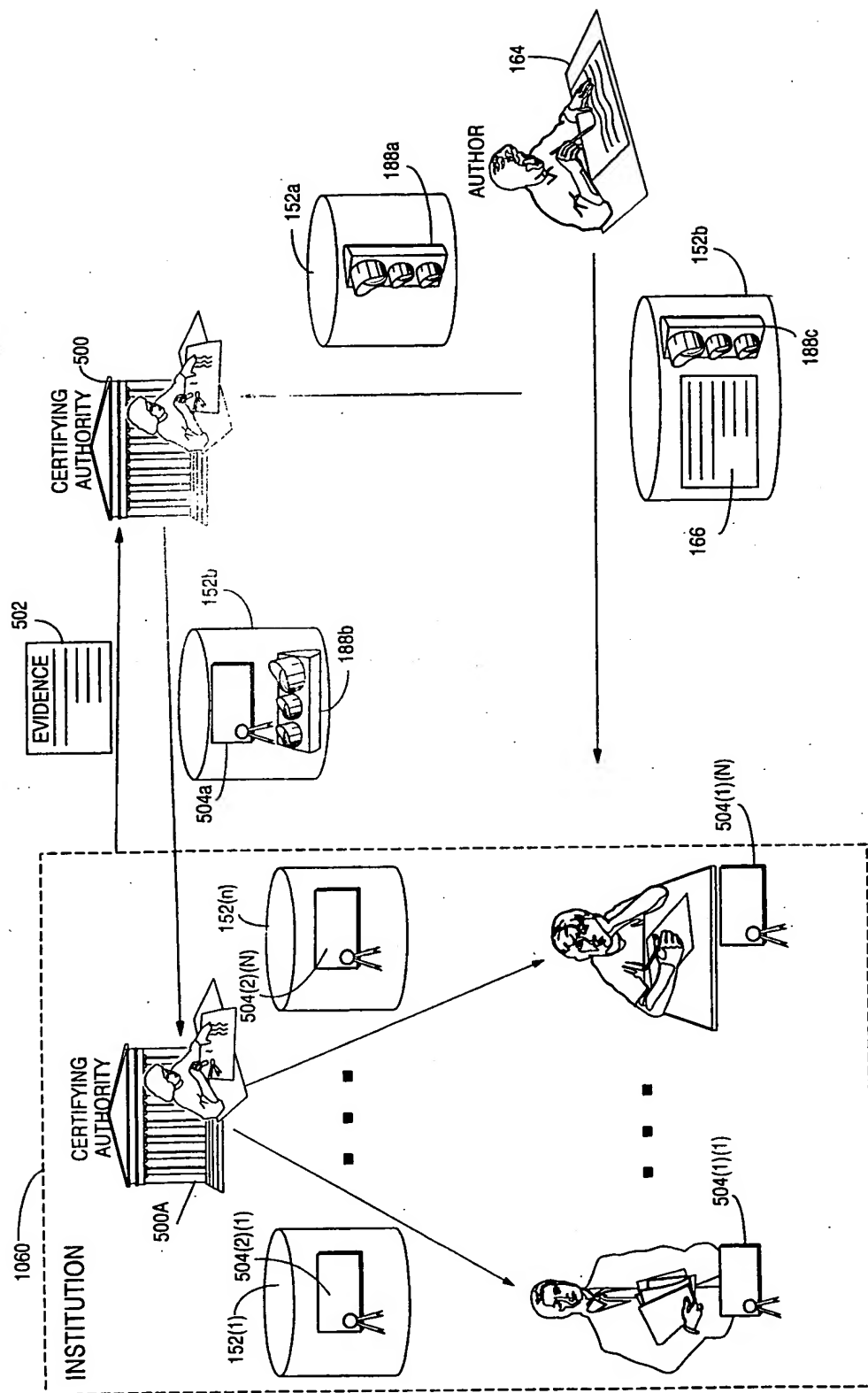


**FIG. 49** Example Certifying Process









**FIG. 50** Distributed Certificate Issuance



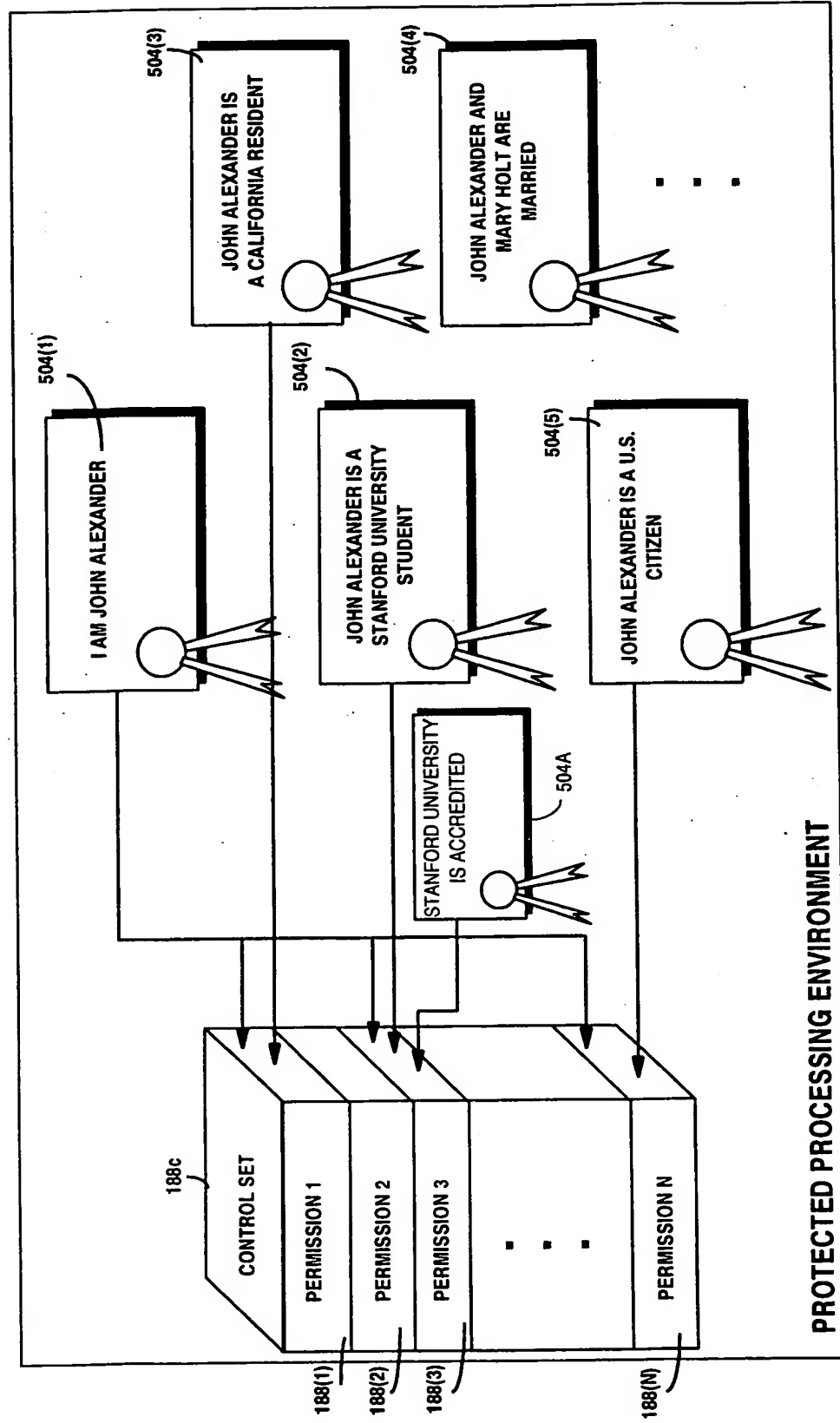


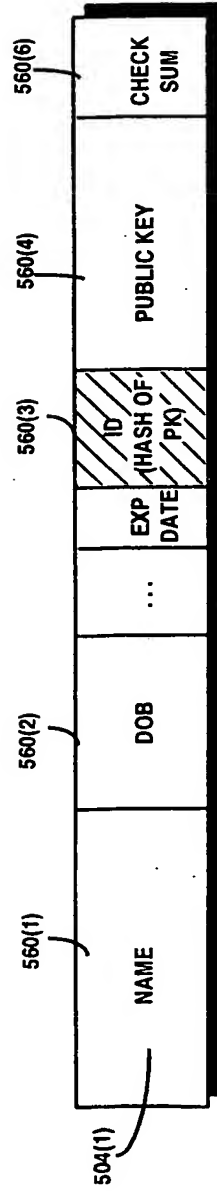




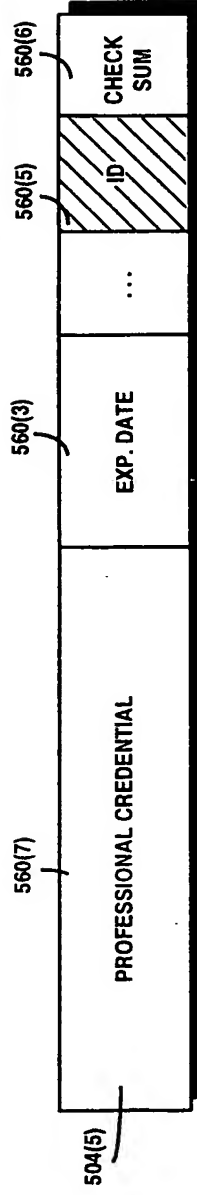


**FIG. 50A** Example Control Set Using Certificates

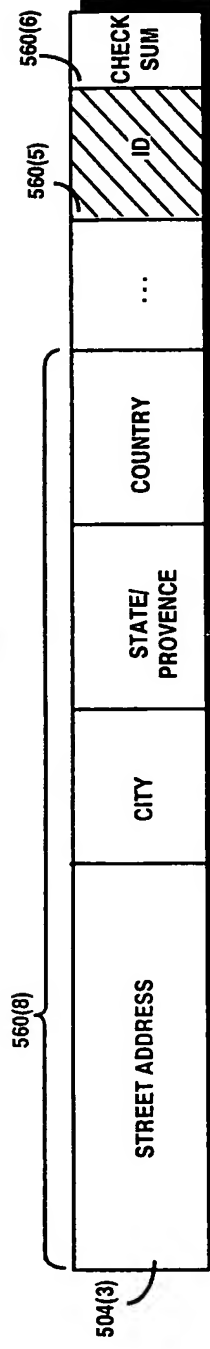




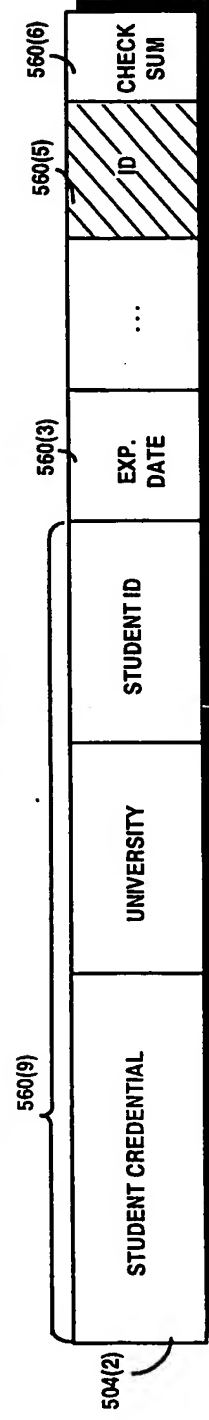
**FIG. 51A**



**FIG. 51B**



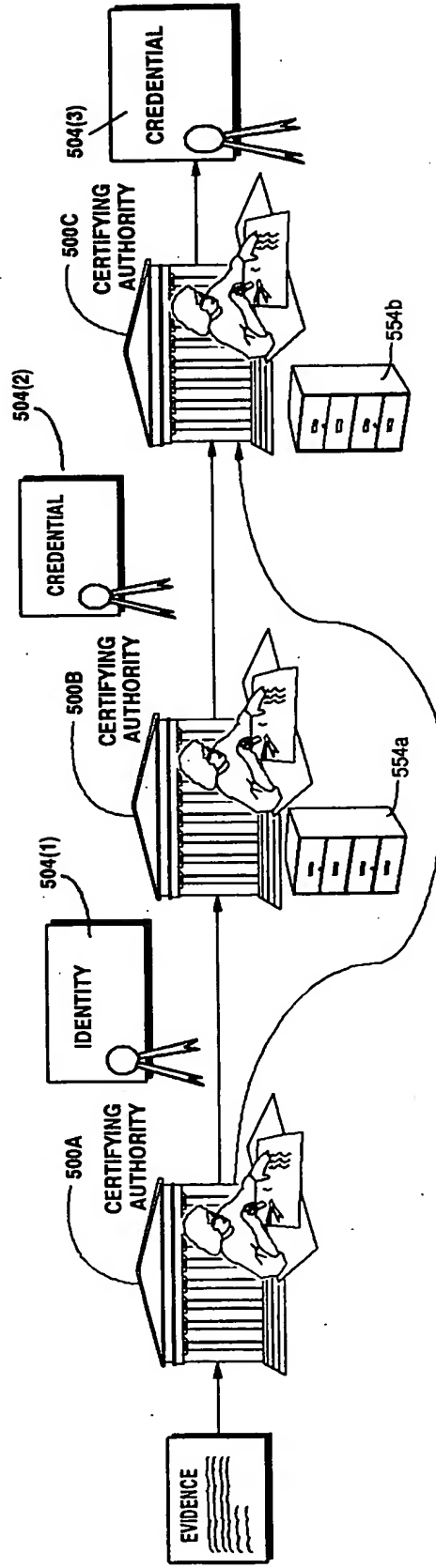
**FIG. 51C**



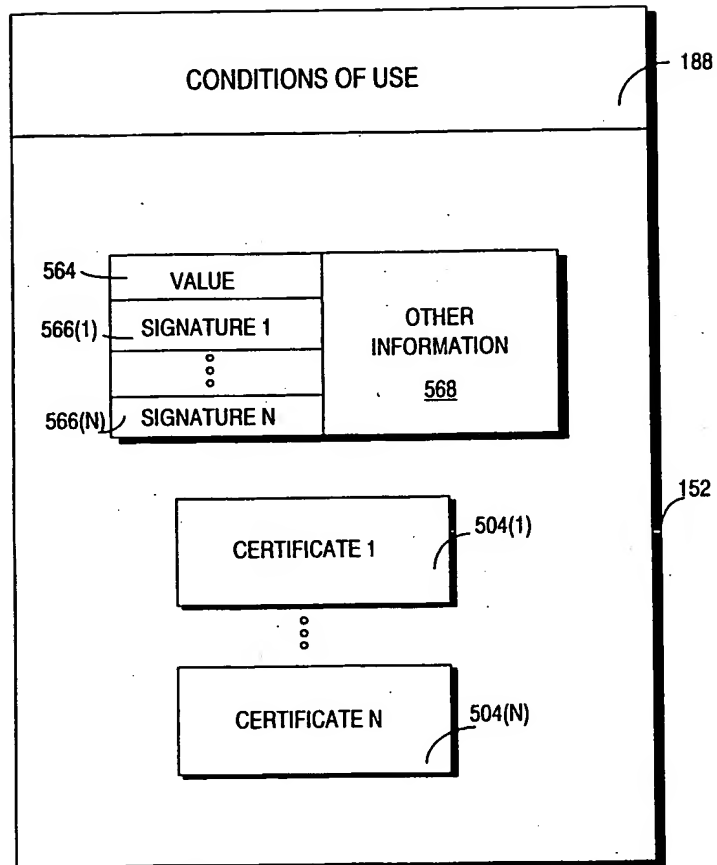
**FIG. 51D**

Example Digital Certificates

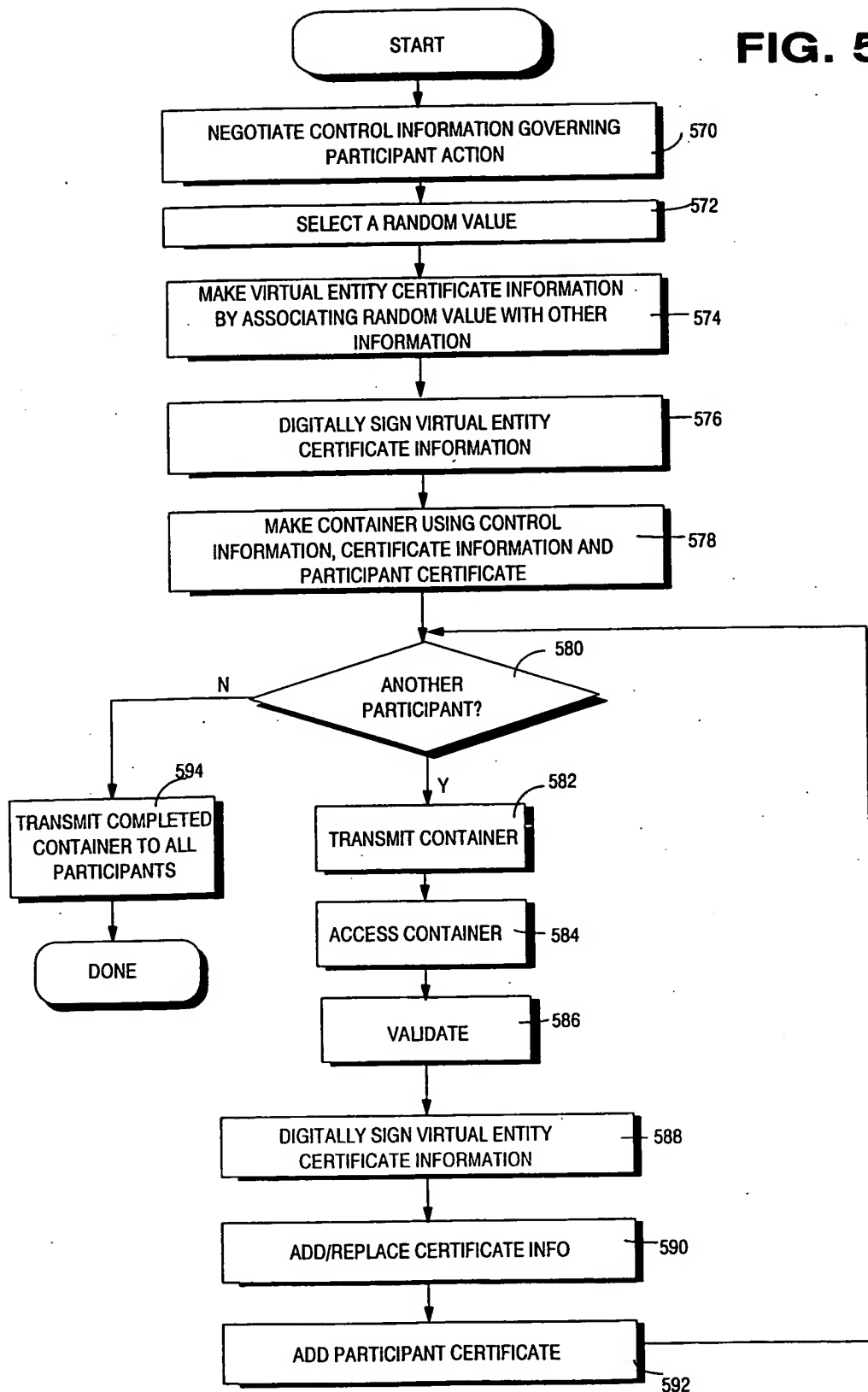
**FIG. 51E** Generating Certificates Based On Other Certificates



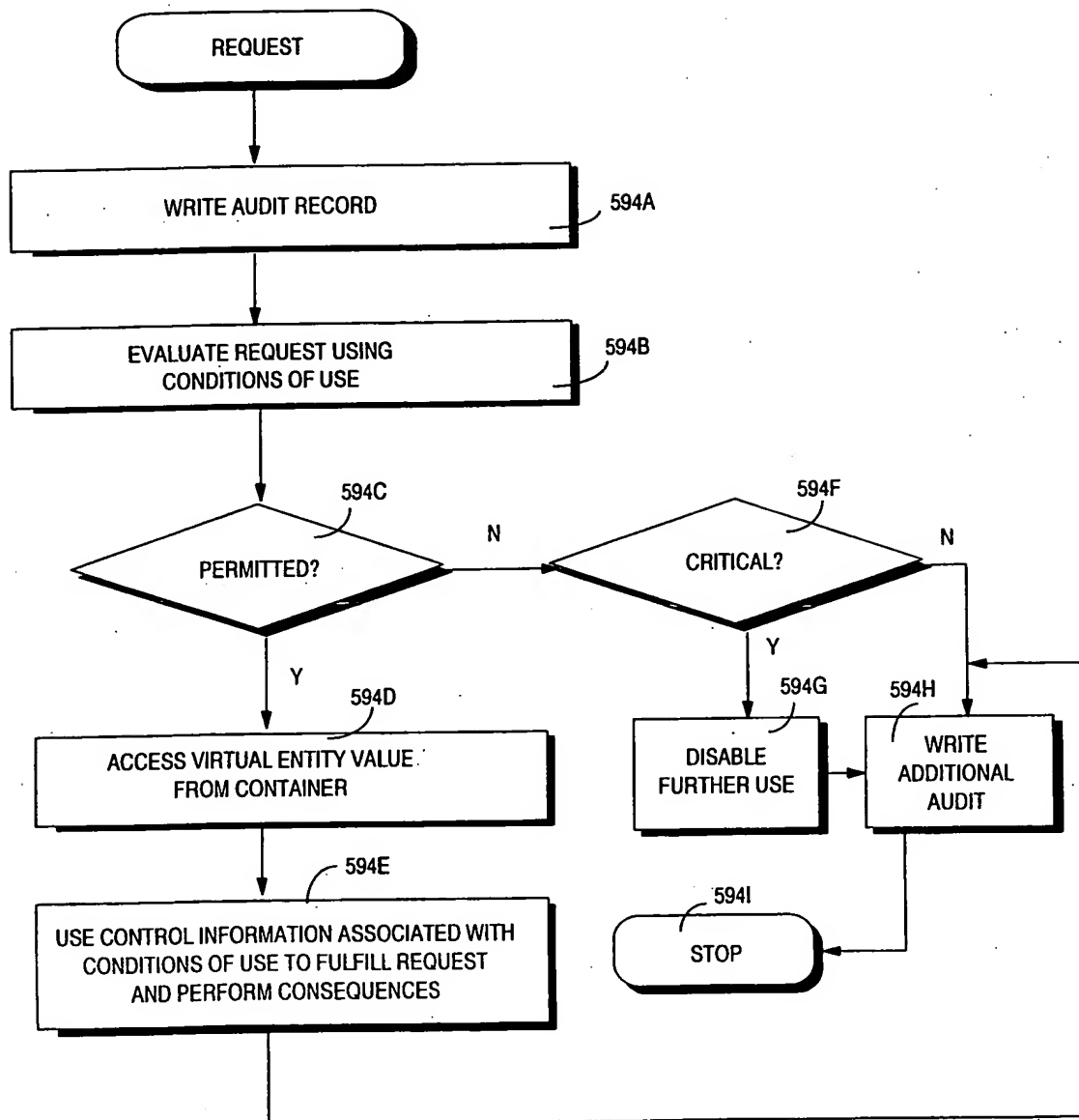
**FIG. 51F**

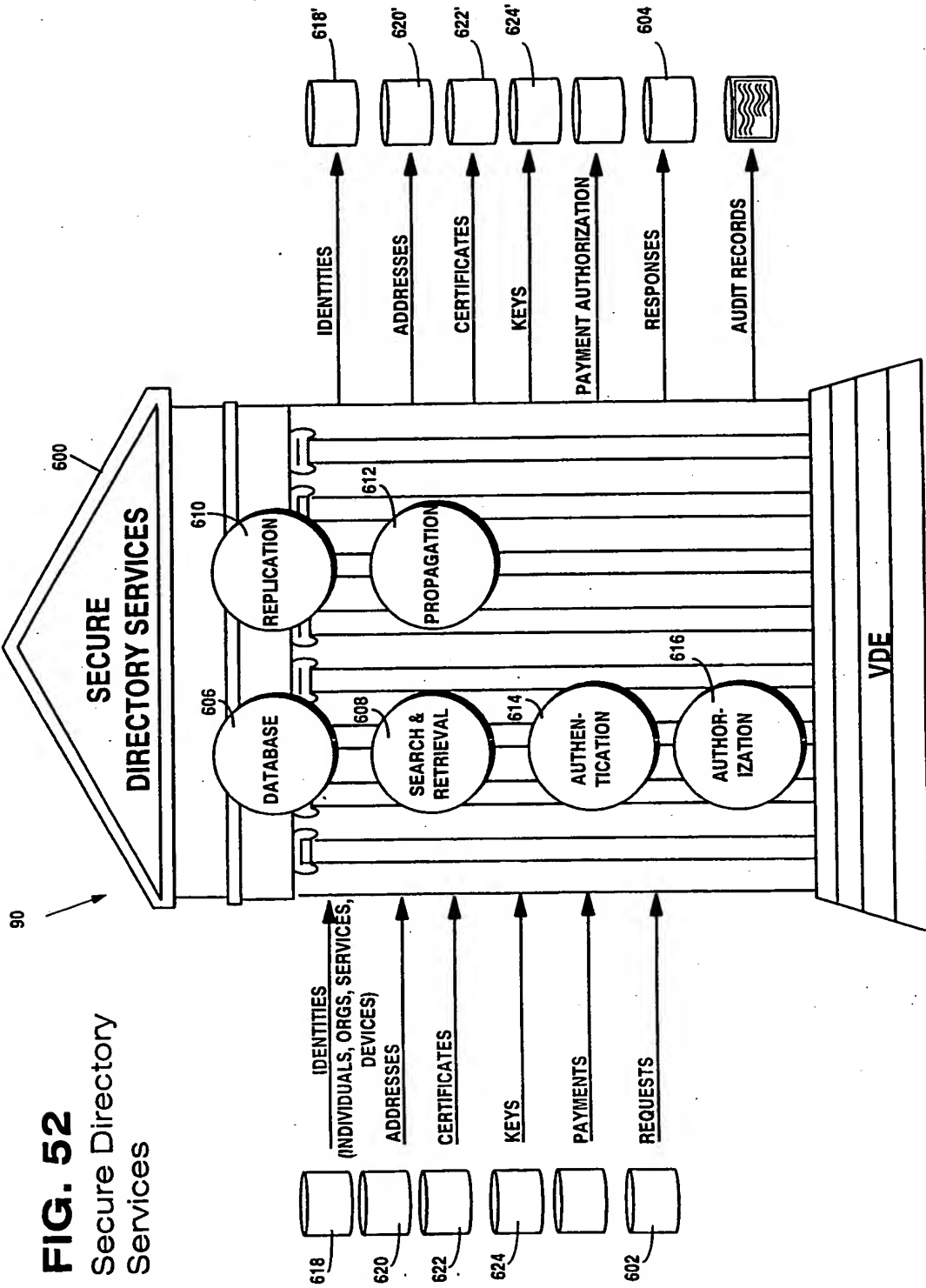


**FIG. 51G**



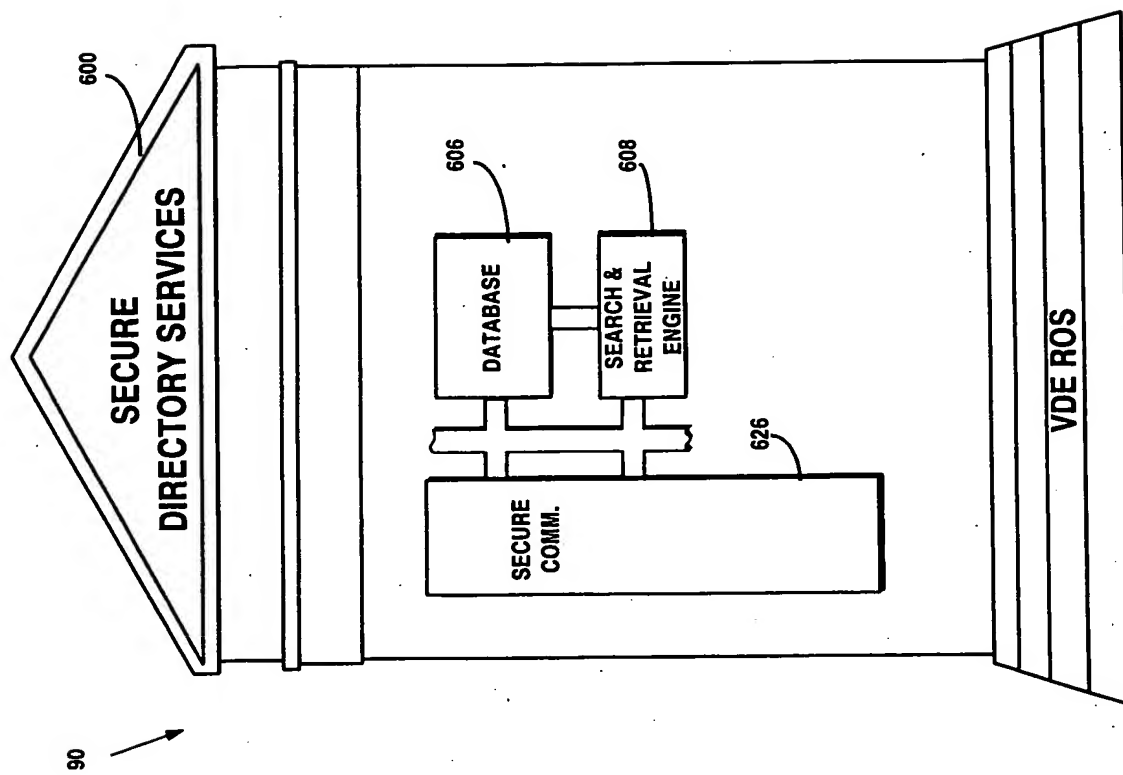
**FIG. 51H**





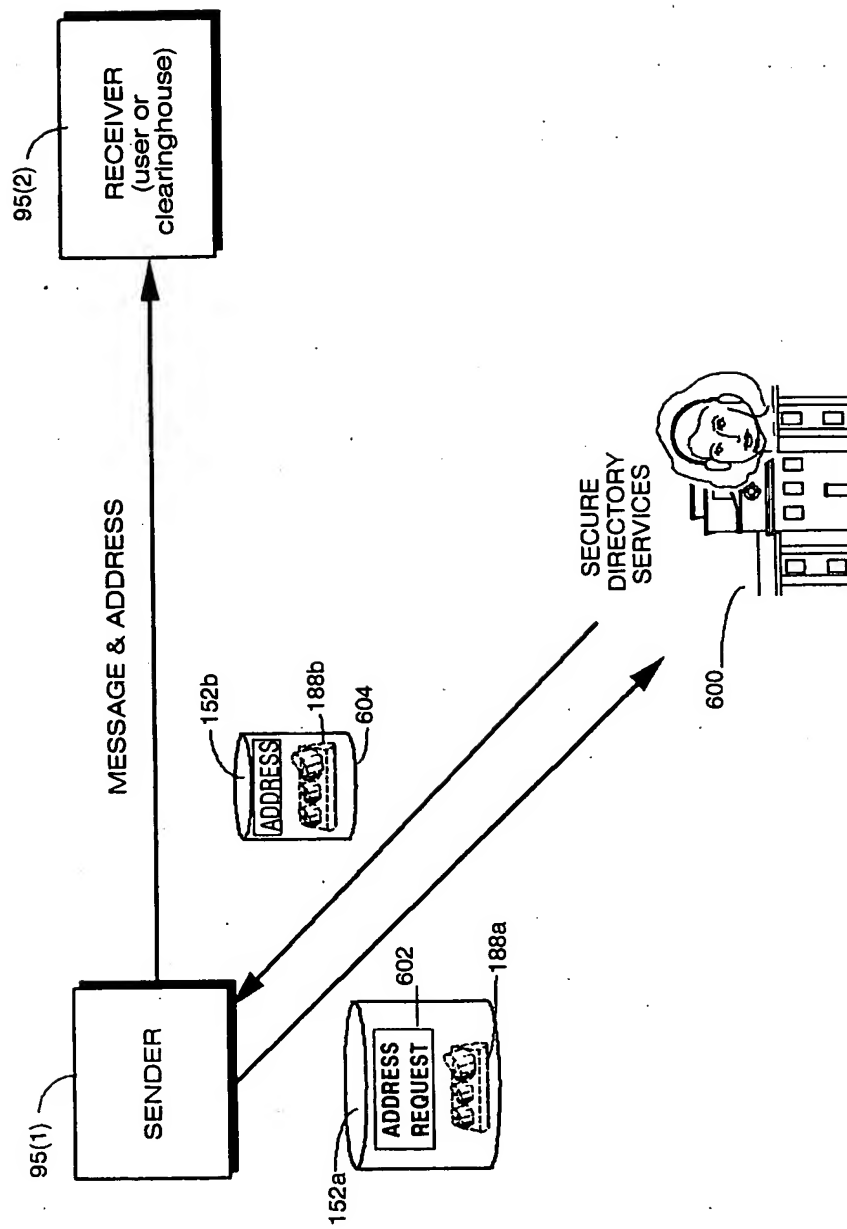
**FIG. 52**  
Secure Directory  
Services

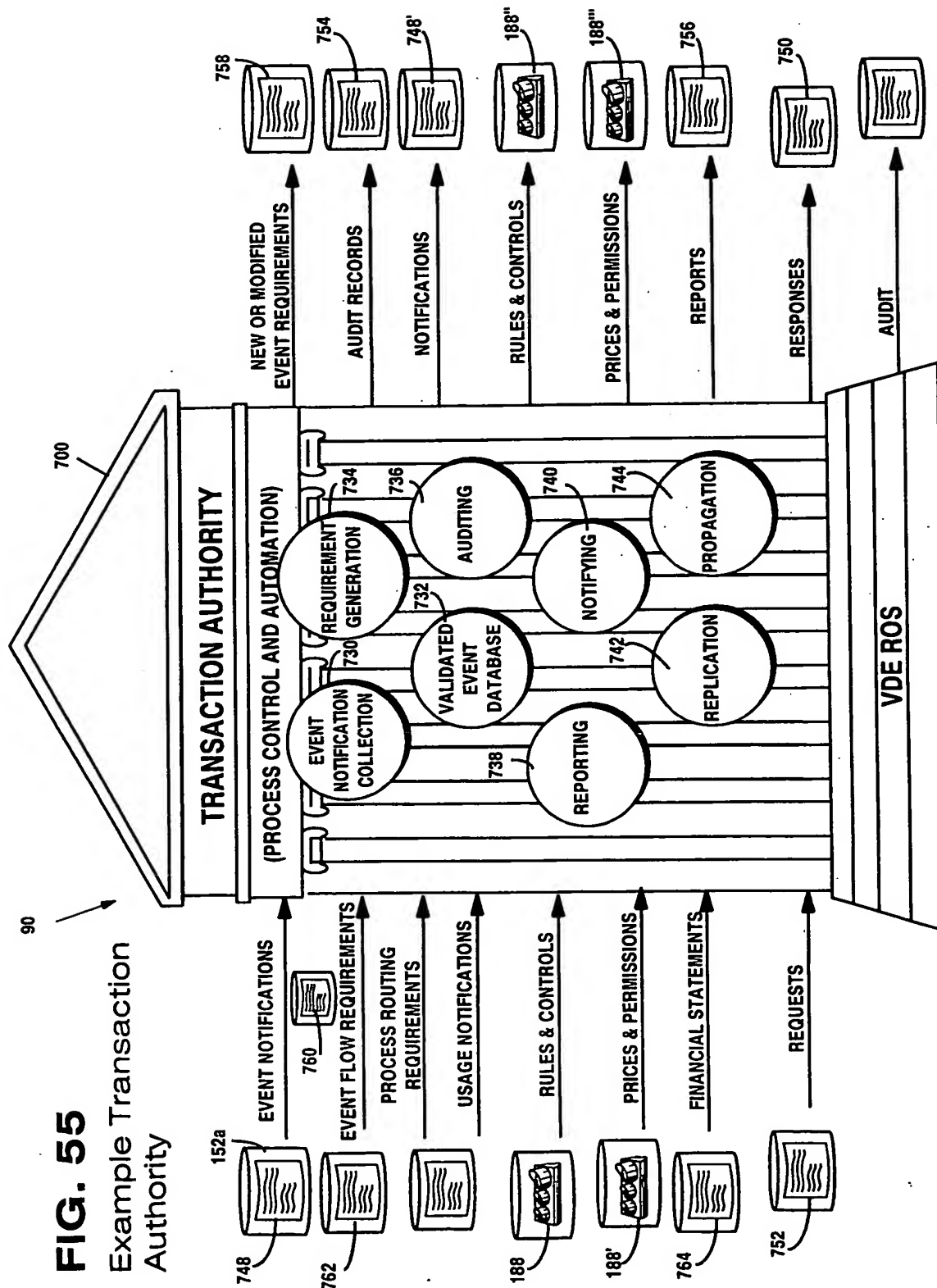
**FIG. 53**  
Example Secure  
Directory Services





**FIG. 54** Example Secure Directory Service Process

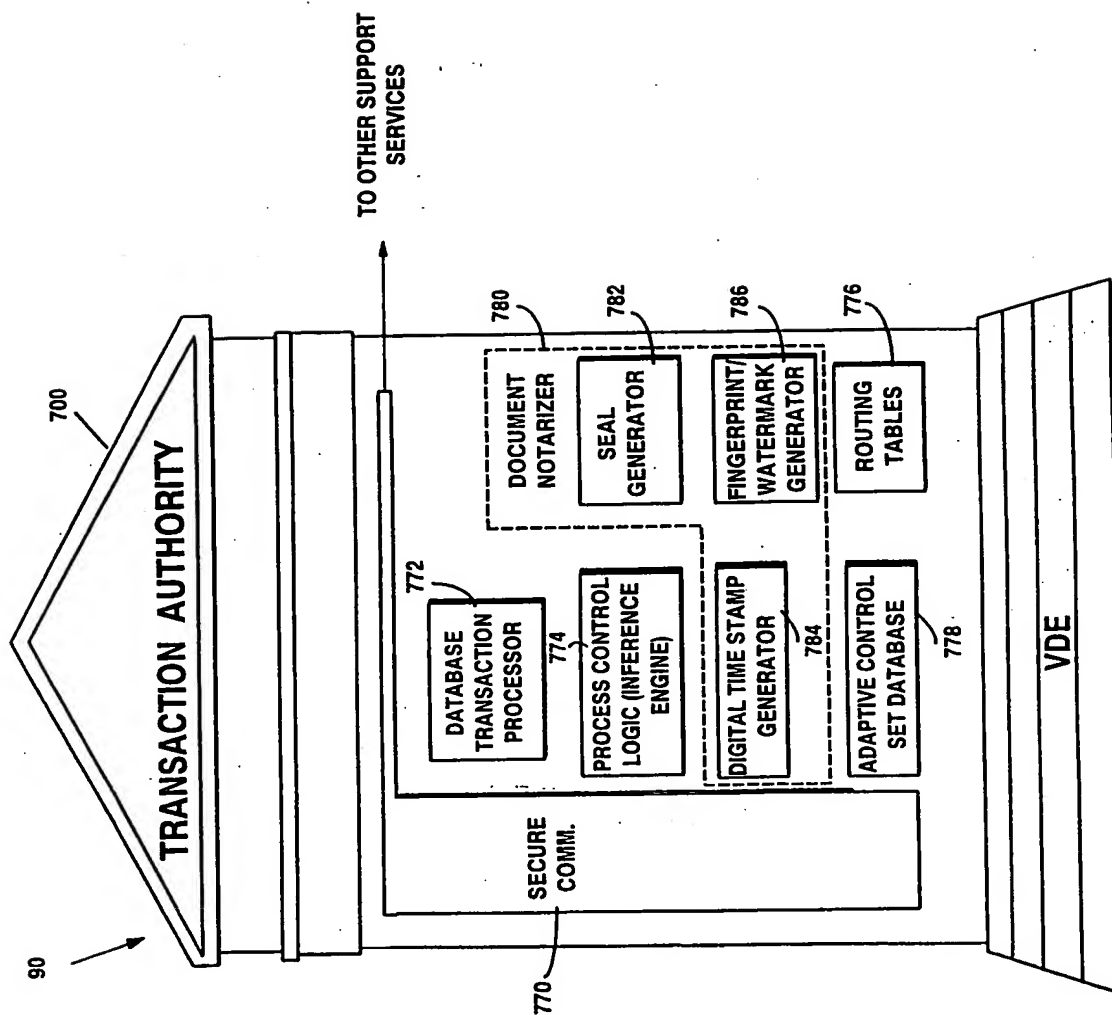


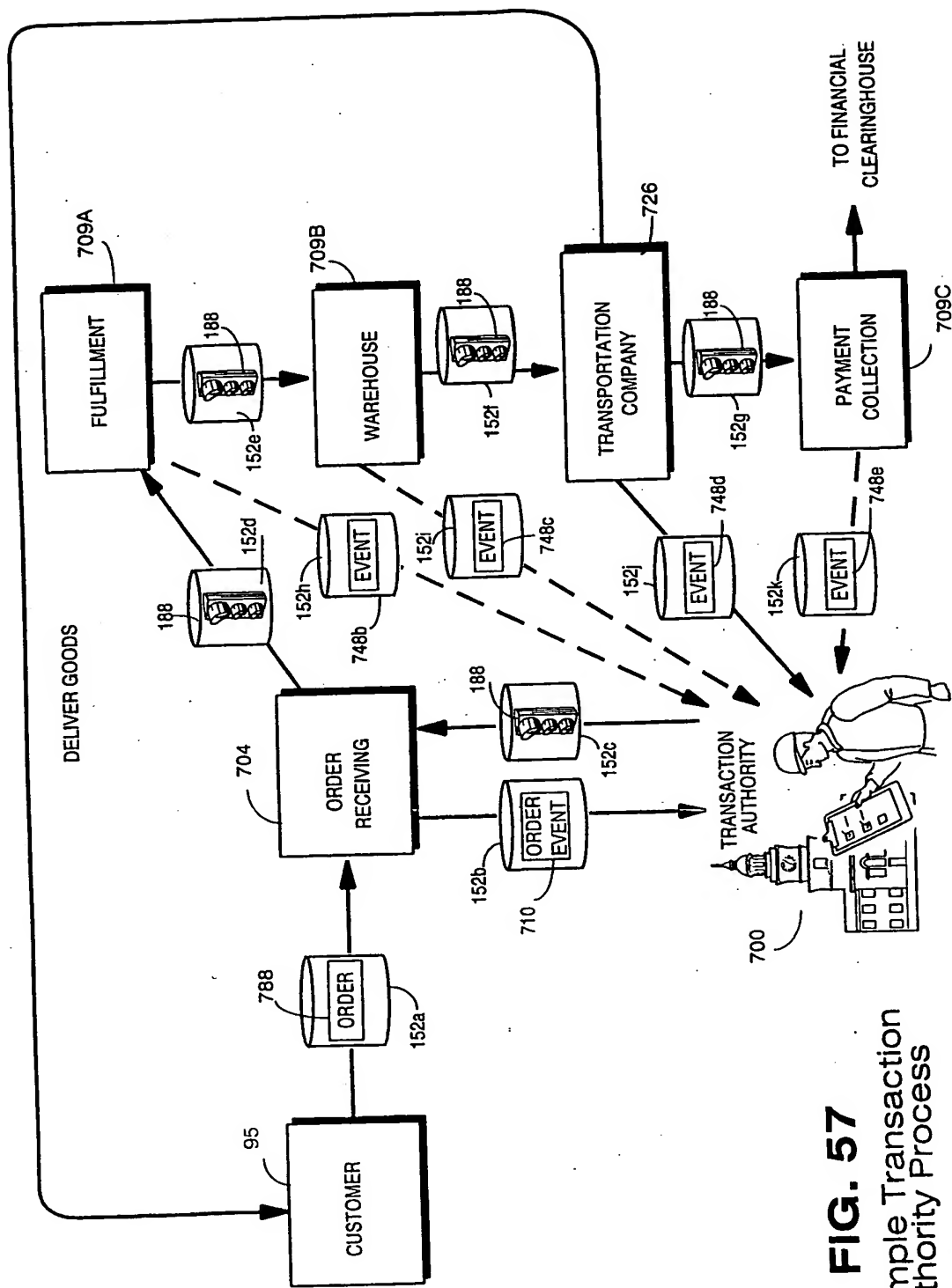


**FIG. 55**

Example Transaction Authority

**FIG. 56**  
Example Transaction  
Authority

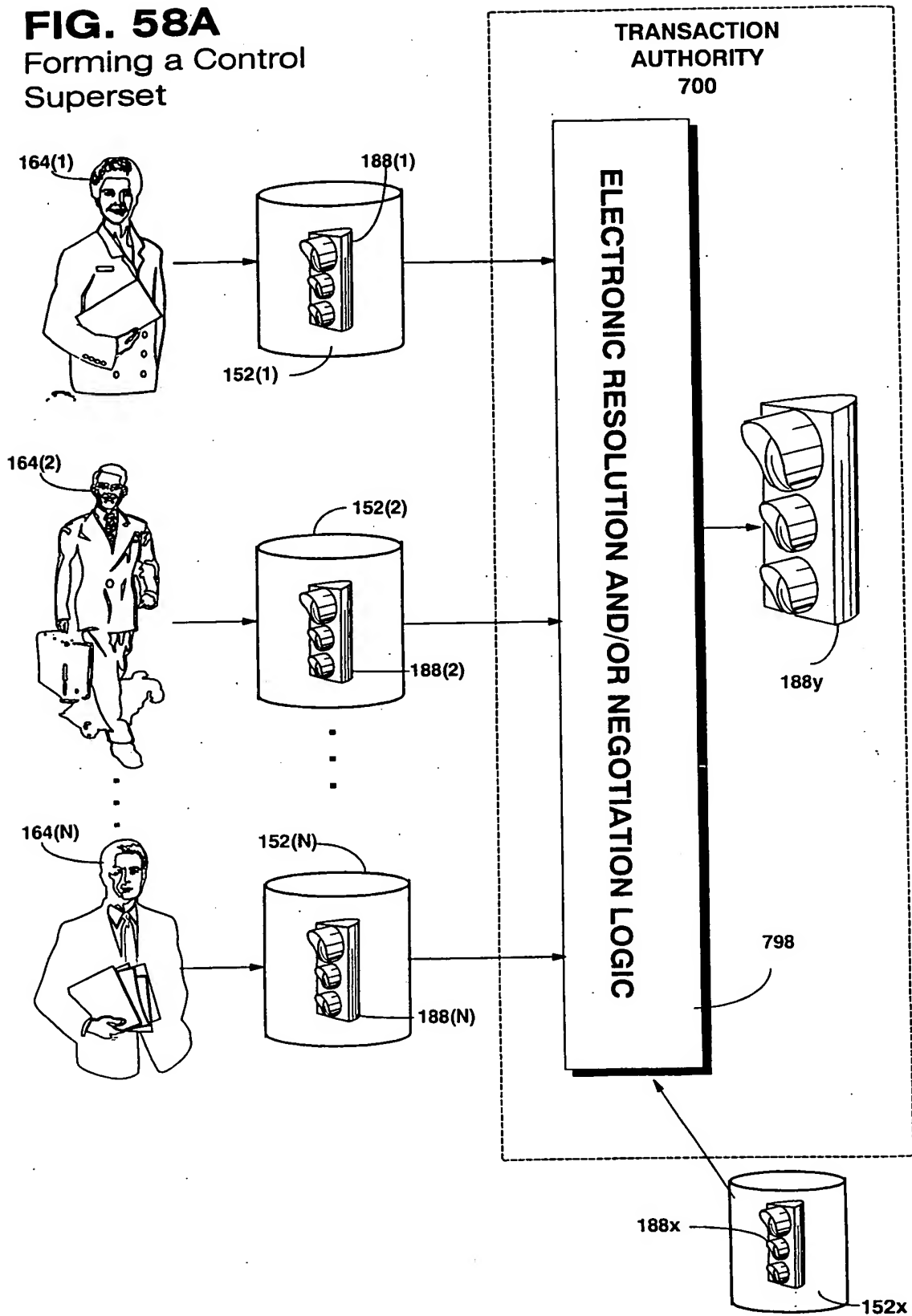




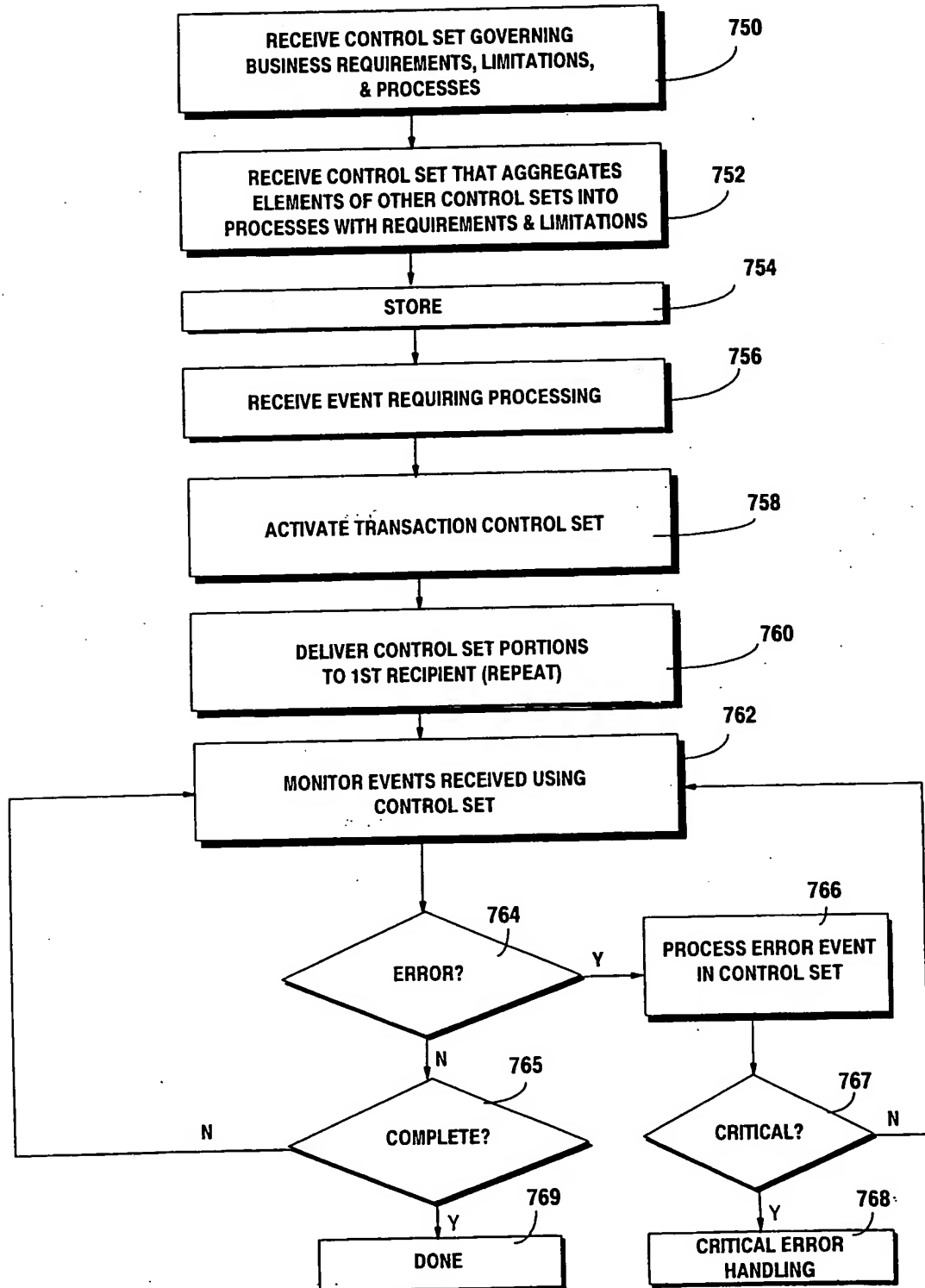
**FIG. 57**  
 Example Transaction  
 Authority Process  
 Control and Automation

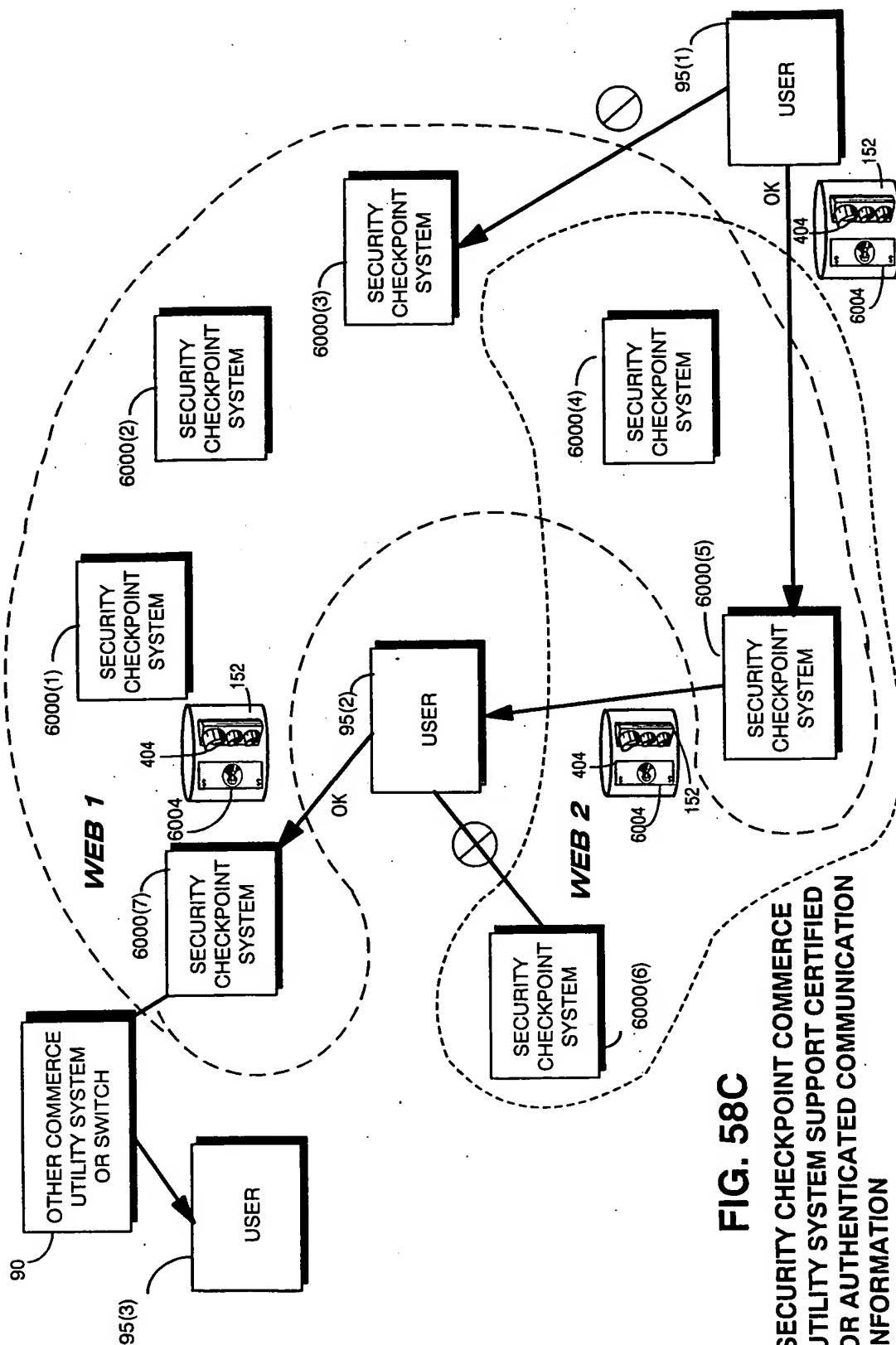
**FIG. 58A**

Forming a Control  
Superset



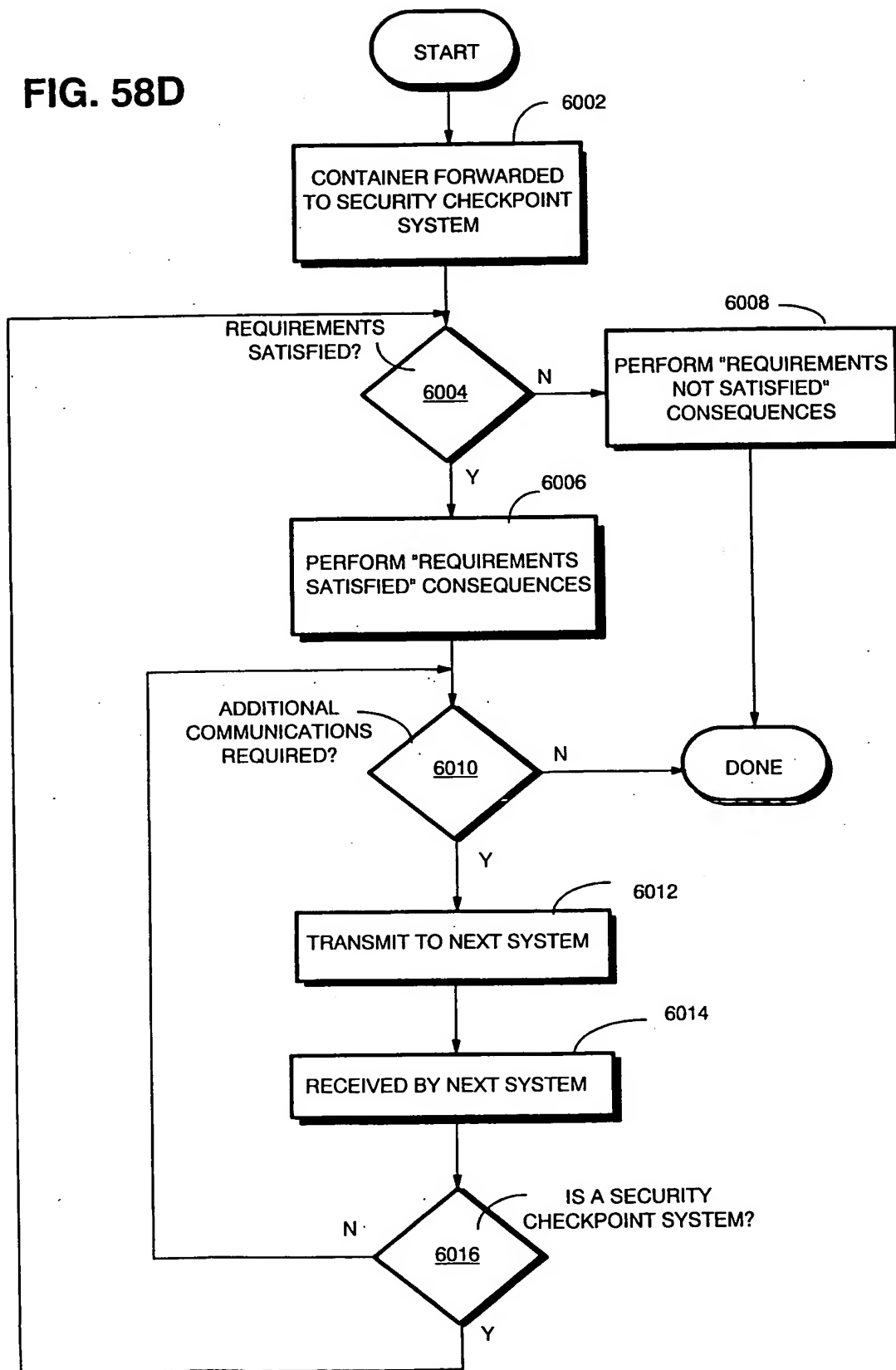
**FIG. 58B** Transaction Authority Example Steps



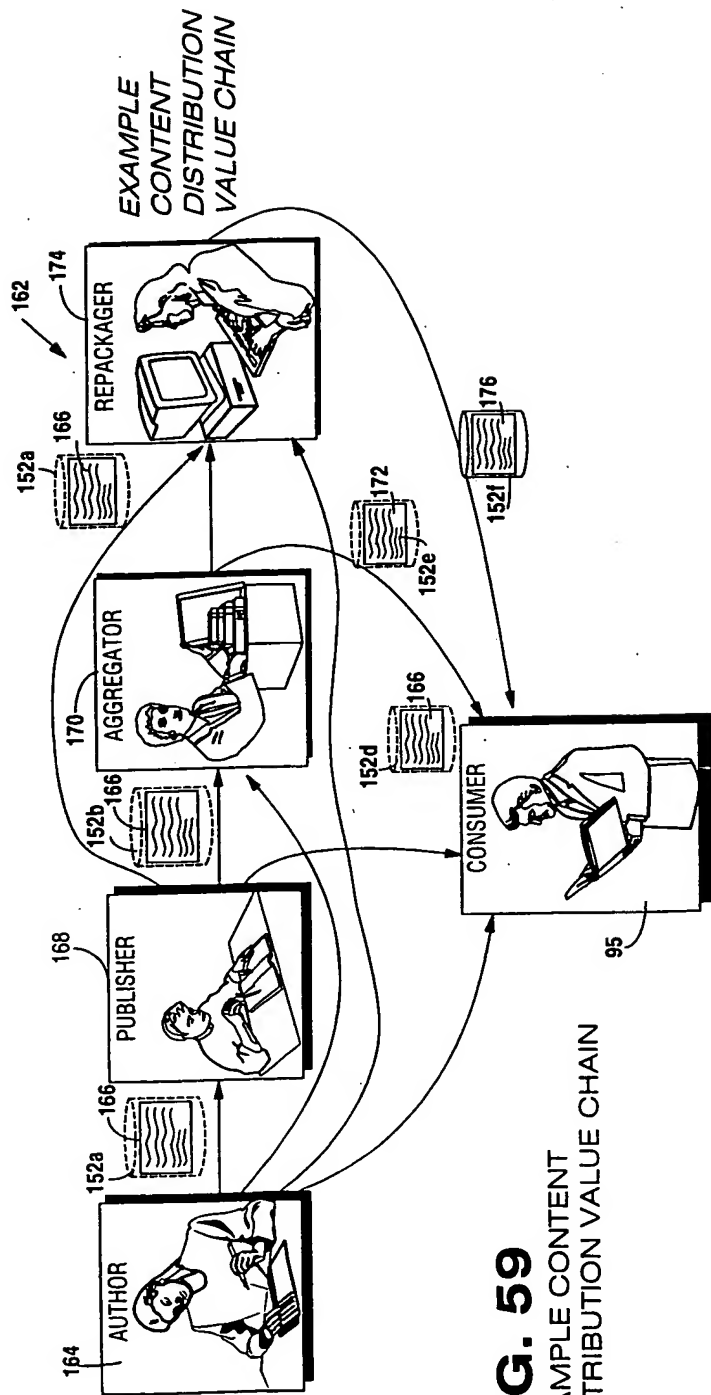


**FIG. 58C**  
 SECURITY CHECKPOINT COMMERCE  
 UTILITY SYSTEM SUPPORT CERTIFIED  
 OR AUTHENTICATED COMMUNICATION  
 INFORMATION

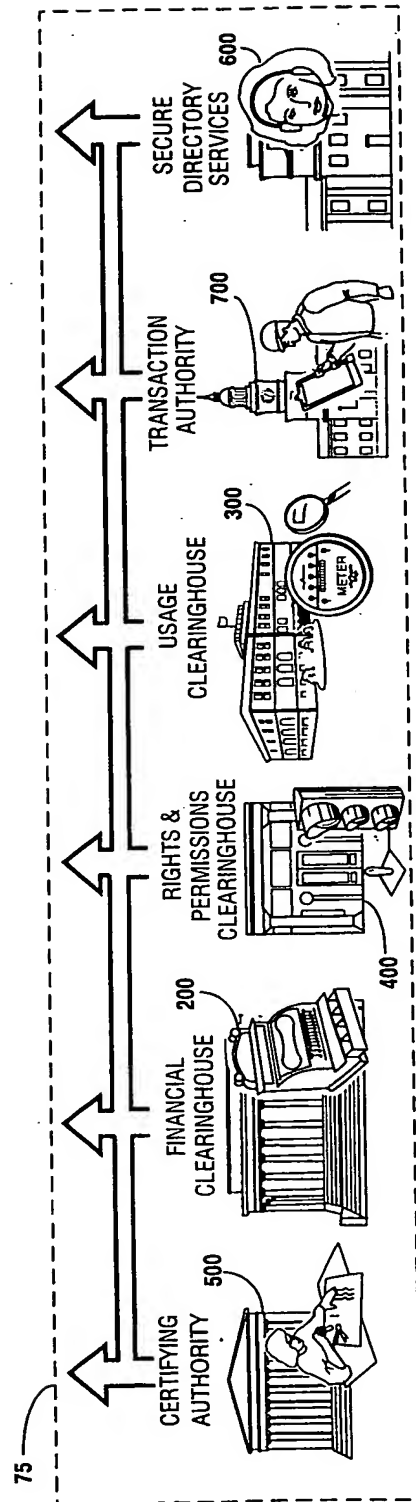
FIG. 58D

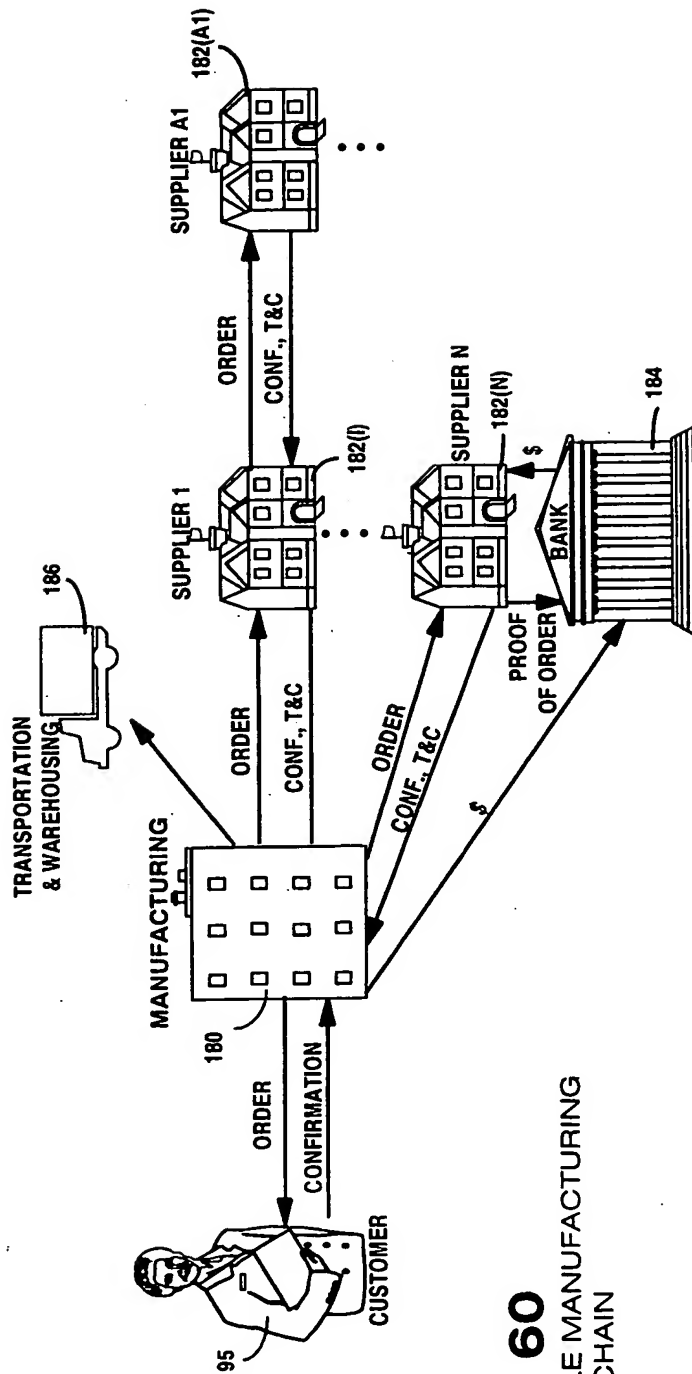




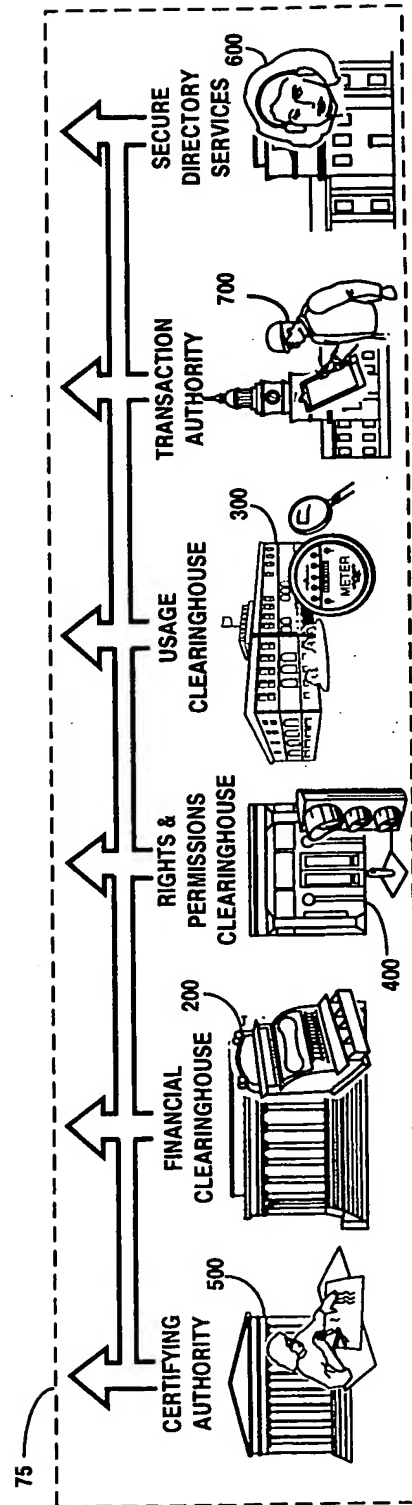


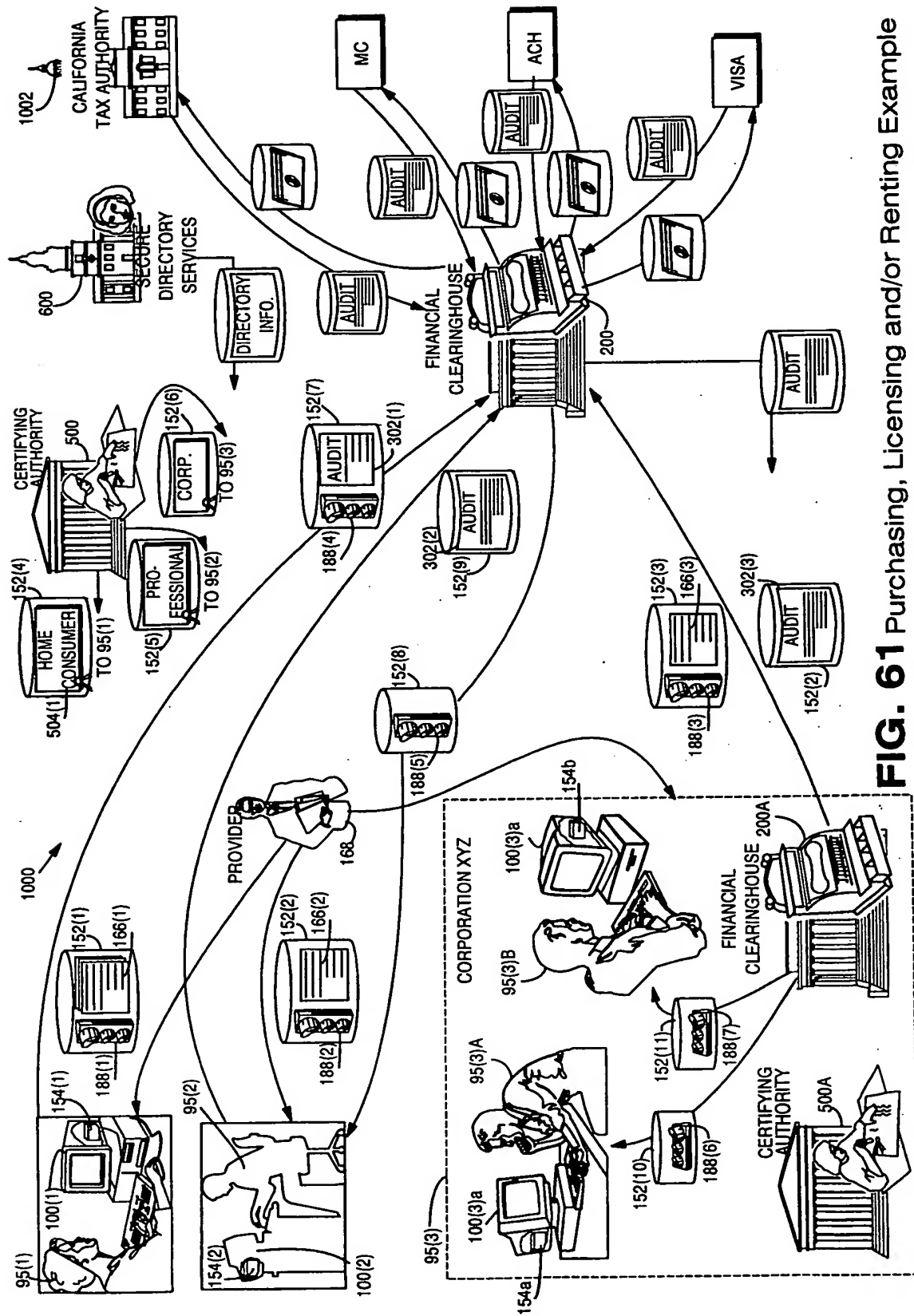
**FIG. 59**  
EXAMPLE CONTENT  
DISTRIBUTION VALUE CHAIN



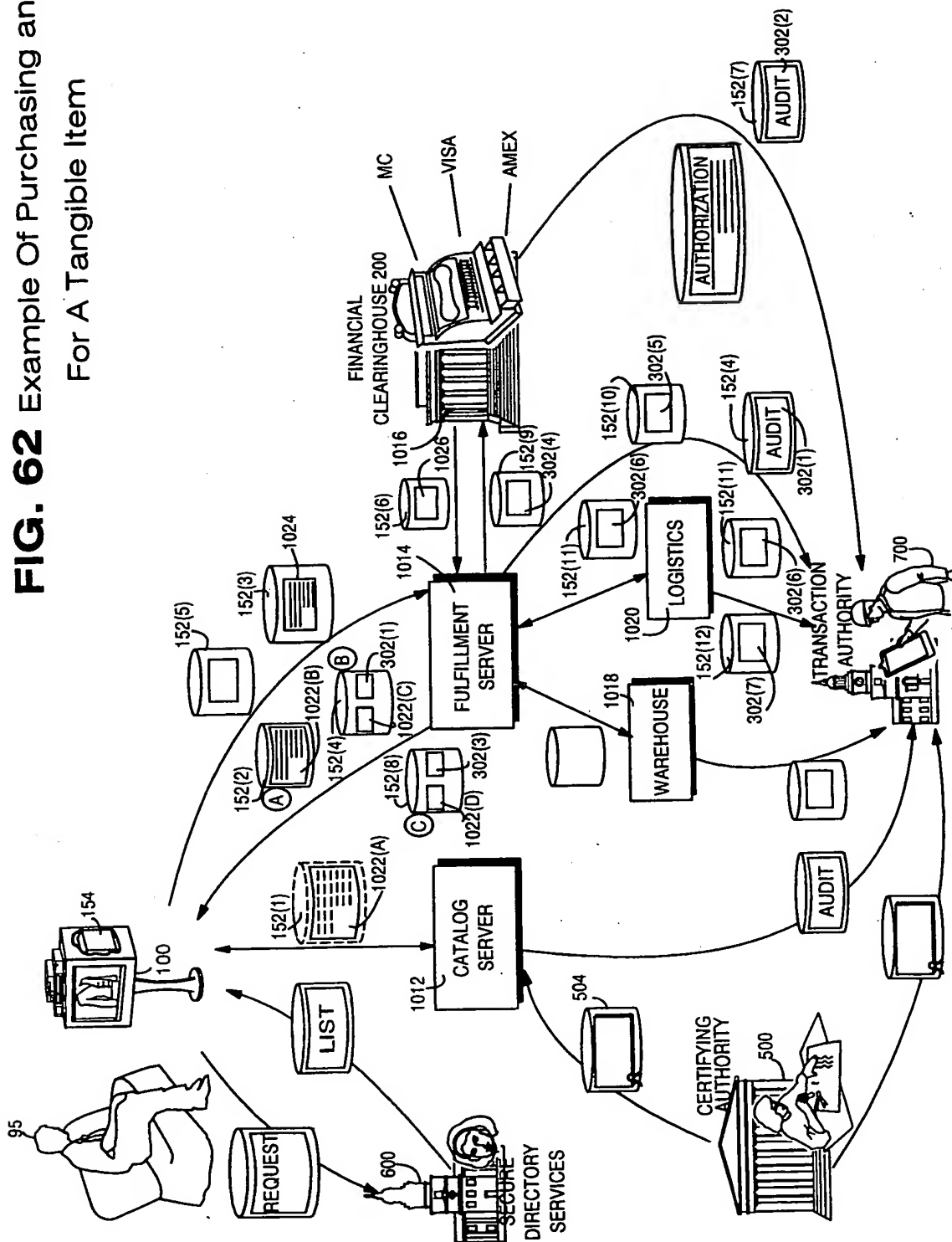


**FIG. 60**  
EXAMPLE MANUFACTURING  
VALUE CHAIN

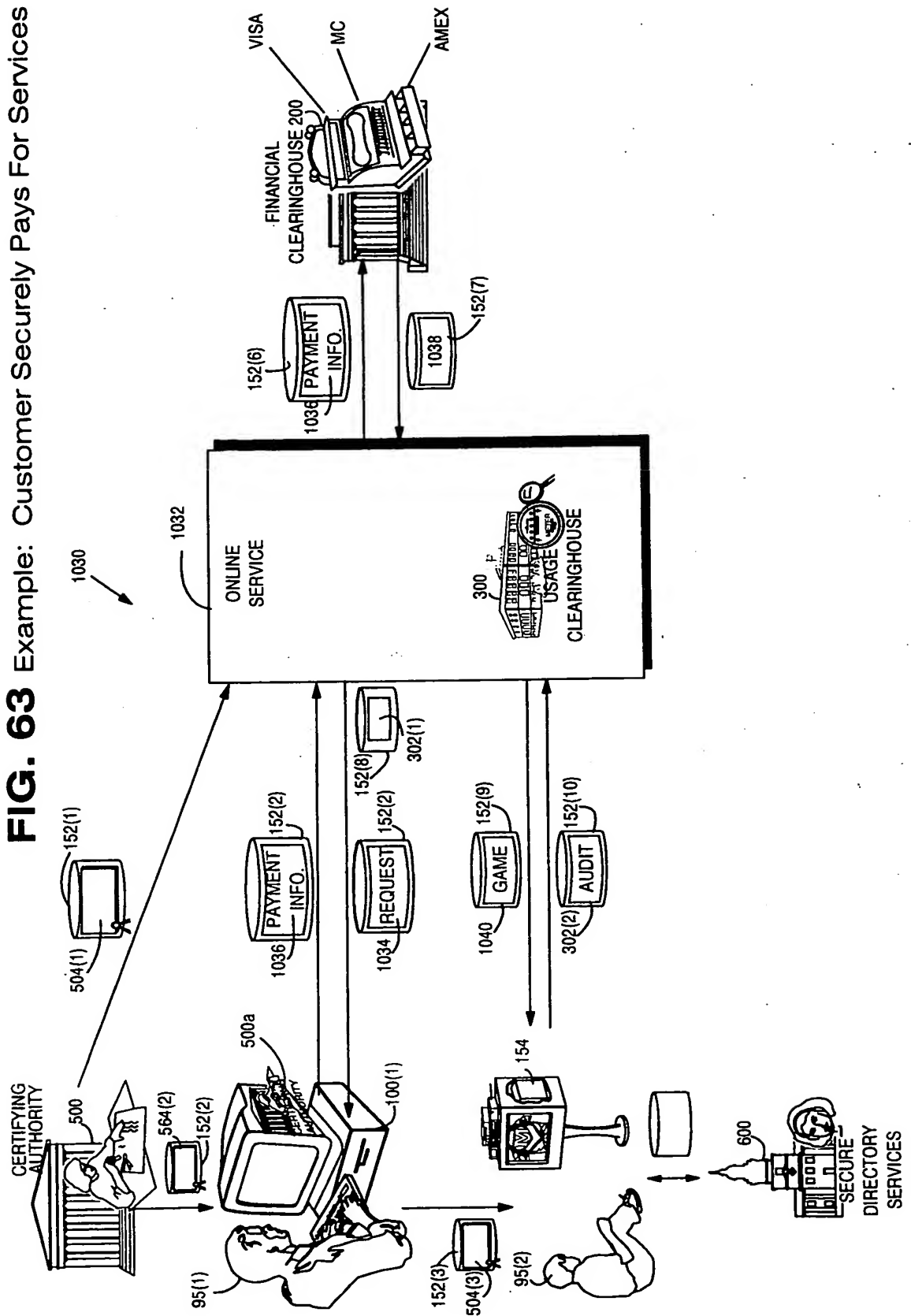




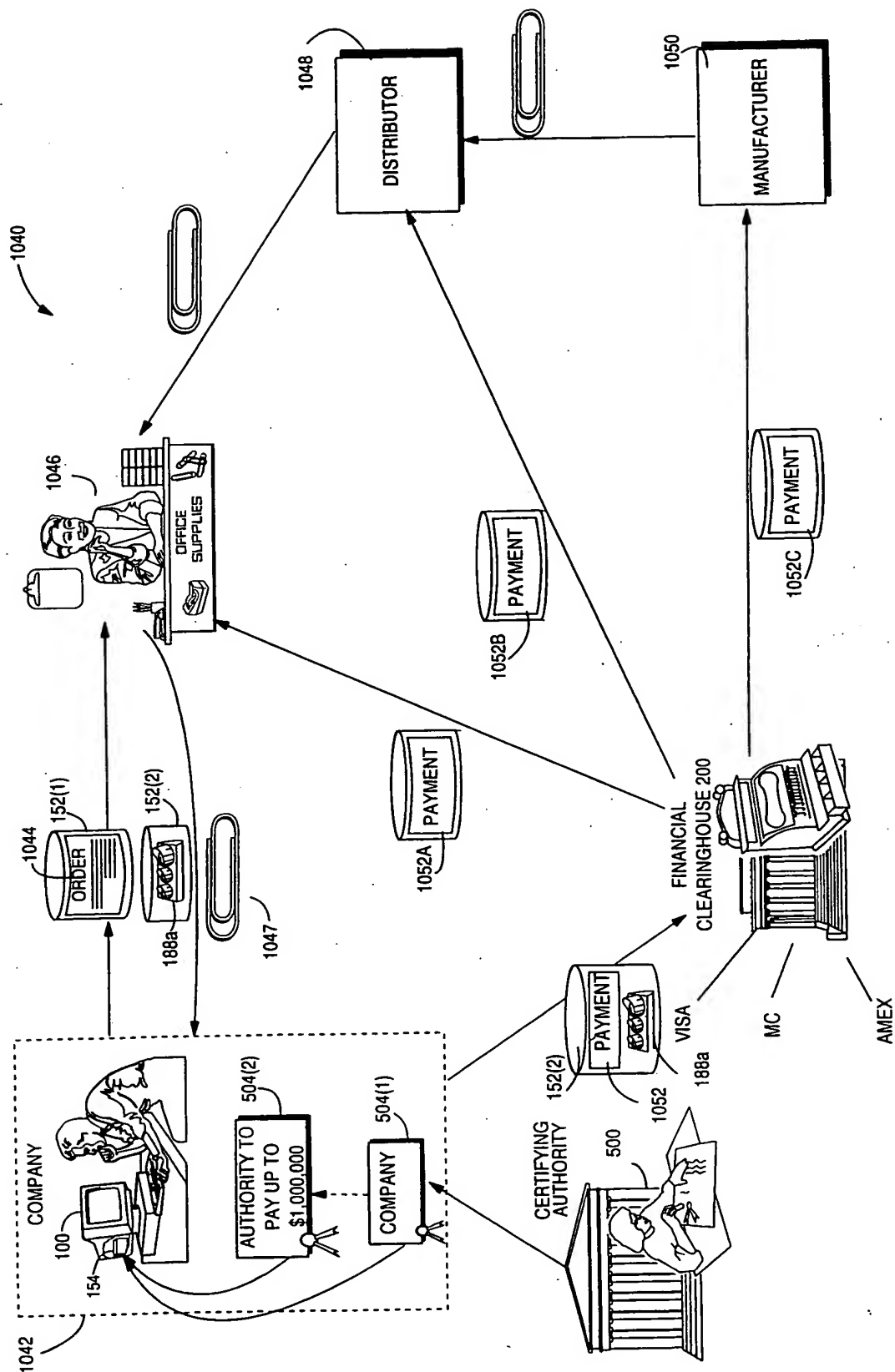
**FIG. 62** Example Of Purchasing and Paying  
For A Tangible Item

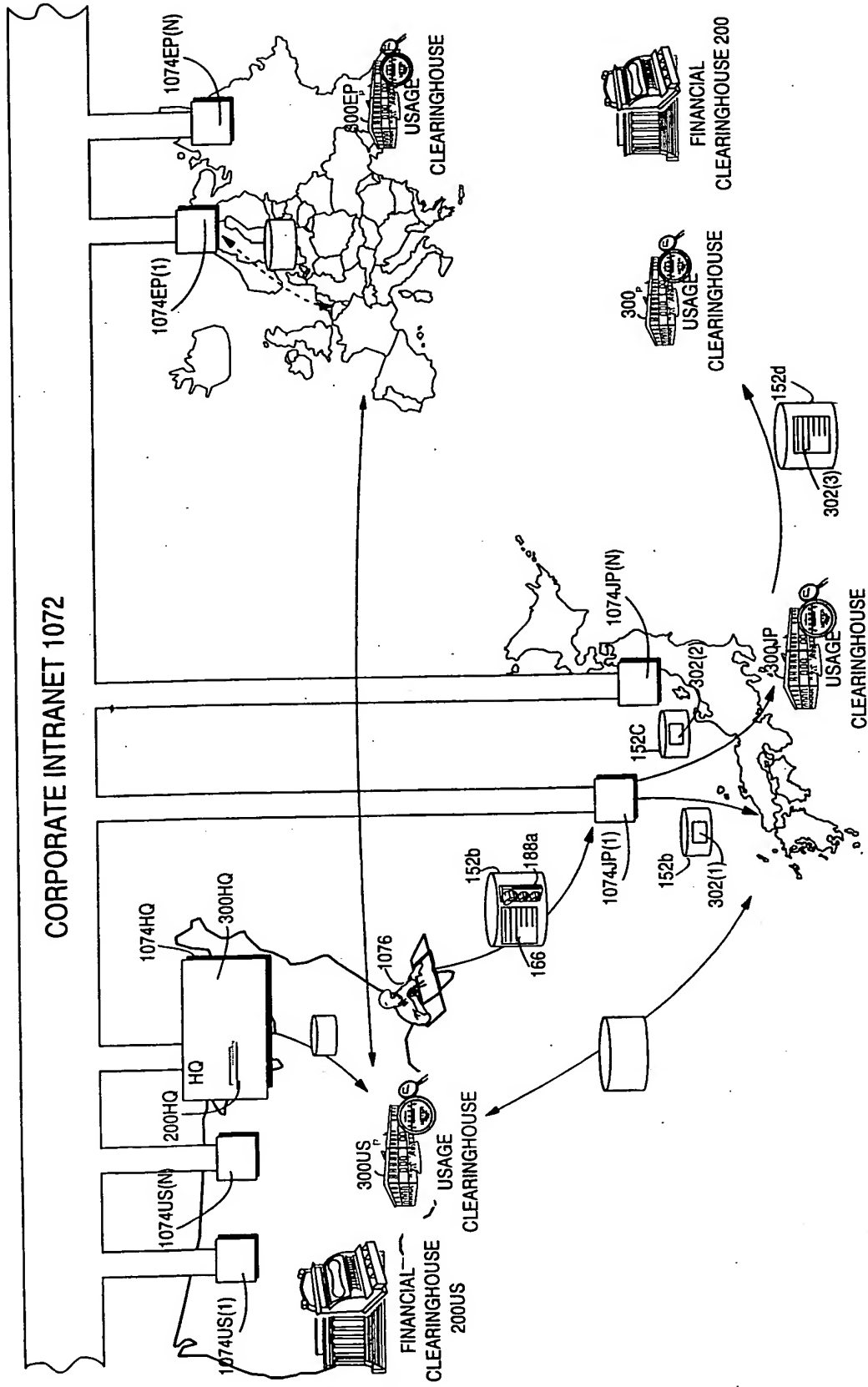


**FIG. 63** Example: Customer Securely Pays For Services

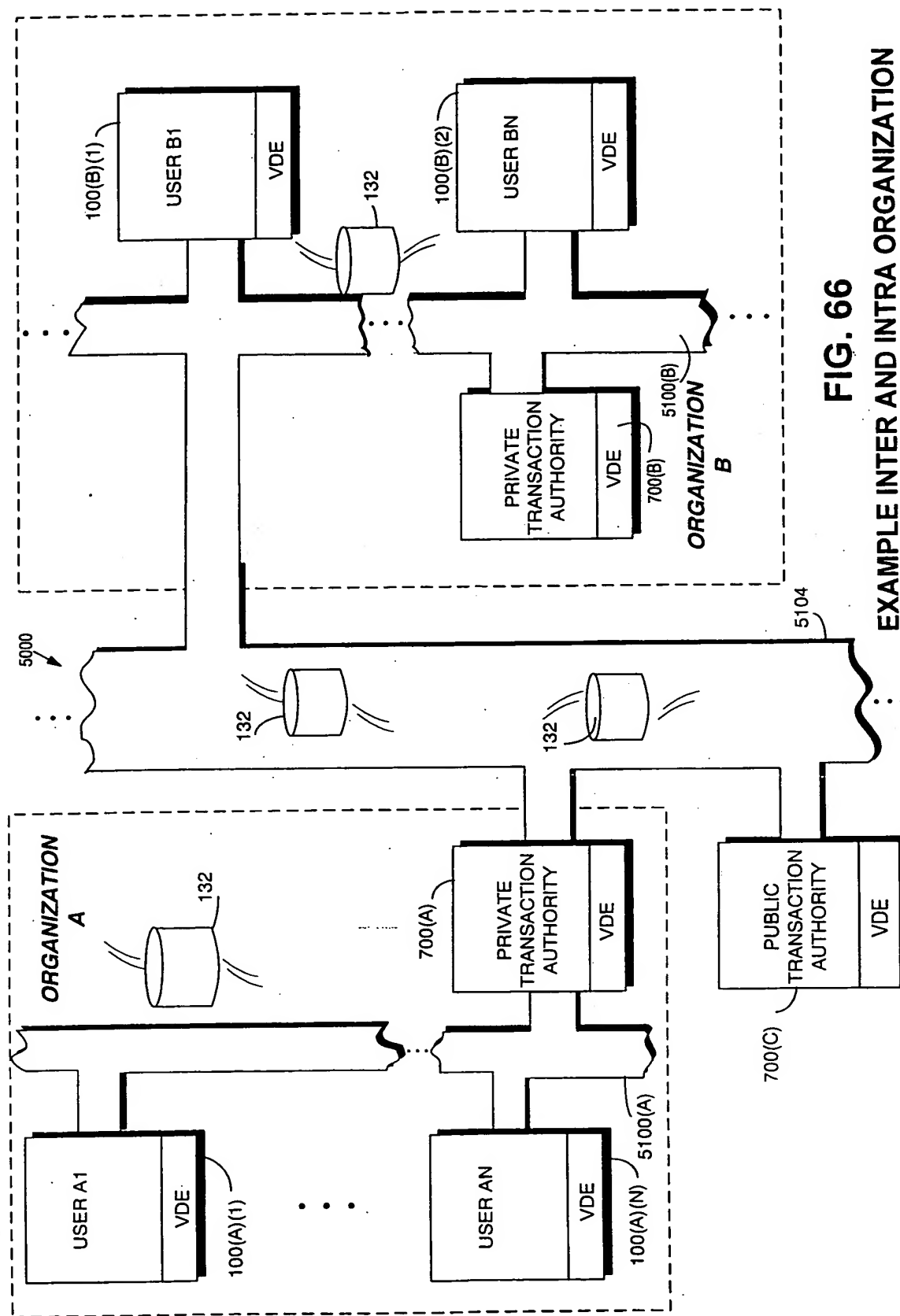


**FIG. 64** Example Value Chain Disaggregation For Purchase of Tangibles





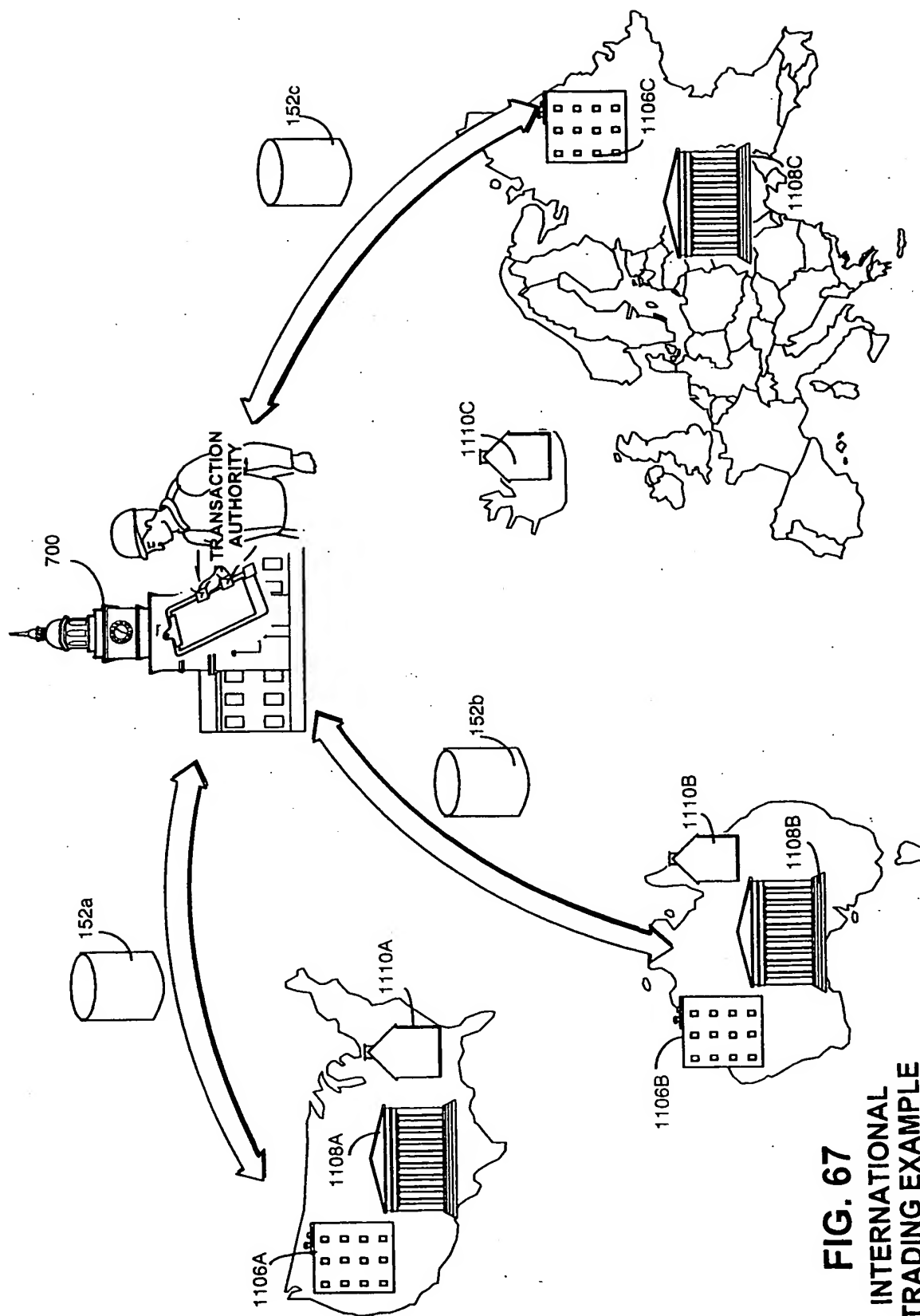
**FIG. 65** Cooperation Among Commerce Utility Systems Internal and External To An Organization



**FIG. 66**

**EXAMPLE INTER AND INTRA ORGANIZATION**





**FIG. 67**  
INTERNATIONAL  
TRADING EXAMPLE